DIMENSIONS OF ILLNESS BEHAVIOR AMONG URBAN MAYA

by

Joyceen S. Boyle

A dissertation submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

College of Nursing

The University of Utah

March 1982

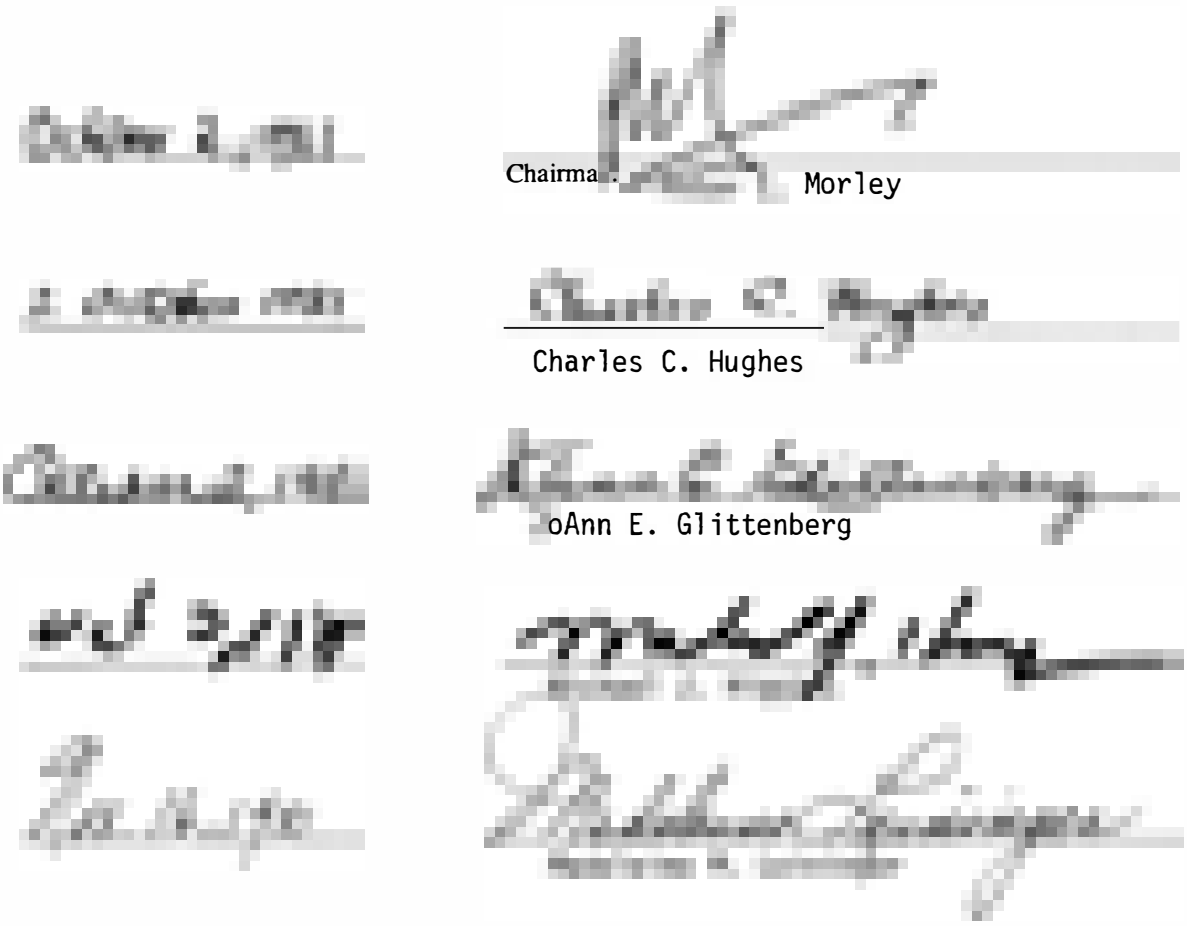
THE UNIVERSITY OF UTAH GRADUATE SCHOOL

SUPERVISORY COMMITTEE APPROVAL

of a dissertation submitted by

Joyceen S. Boyle

This dissertation has been read by each member of the following supervisory committee and by majority vote has been found to be satisfactory.



Chairman: Morley

Charles C. Hughes

oAnn E. Glittenberg

THE UNIVERSITY OF UTAH GRADUATE SCHOOL

FINAL READING APPROVAL

To the Graduate Council of The University of Utah:

I have read the dissertation of Joyceen S. Boyle in its final form and have found that (1) its format, citations, and bibliographic style are consistent and acceptable; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the Supervisory Committee and is ready for submission to the Graduate School.

Date

or the Major Department

Linda K. Amos, Ed.D., F.A.A.N.
Chairman/ Dean

Approved for the Graduate Council

Dean of The Graduate School

ABSTRACT

The purpose of this research was to explore selected health-illness beliefs and practices of poor Indian households living in an urban Guatemalan city. The sample consisted of 22 households or 134 individuals. Differences in standards of living among households were related to income, occupation, education, housing and material belongings. Household compositions were classified according to kinship, residence and domestic function.

Health beliefs and practices surrounding 13 common illness manifestations were investigated. Prevention, causation and treatment of illness were related to environmental conditions and personal behaviors which influenced the individual's psychophysical state. Concepts of hot-cold and strong-weak underlaid many health and illness beliefs.

Sample members described illness symptoms and actions taken in response to illness during a four week period. A total of 135 incidents were reported by the 22 households. Seventy-seven percent of all women, 24 percent of all men and 43 percent of children reported symptoms of illness. Respiratory illnesses were reported most frequently. Of the 135 symptoms, 32 percent were cared for by self and family, while 61 percent were referred to the social networks, pharmacies, indigenous caregivers and religious healers.

Western medical services were obtained in 4.5 percent of all illnesses, while traditional practitioners were consulted for 2.5 percent of the symptoms. Treatment by a physician for most kinds of illnesses was considered to offer the highest likelihood of cure. Traditional practitioners often were consulted in conjunction with physicians or if the illness was considered uncomplicated or not amenable to medical treatment. The findings suggest reluctance to use either modern or traditional services was most frequently related to the limited economic means of the sample.

CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

ACKNOWLEDGMENTS

This study was supported in part by National Research Service Award Grant IF31-NU-05115-01, Department of Health, Education and Welfare, Health Resources Administration, Division of Nursing.

Appreciation is extended to my committee members whose encouragement, support, patience and helpful criticism have been invaluable.

I wish to thank my companions in Guatemala who so generously shared their lives with me. This research would not have been possible without their assistance and cooperation. I shall never forget their kindness and generosity.

This dissertation is dedicated to my son John Patrick Boyle and to Marco Antonio Lima whose presence made our stay in Quetzaltenango an adventure.

CHAPTER I

INTRODUCTION AND RATIONALE

Transcultural Nursing

Professional nurses come into contact with people from a variety of cultural backgrounds and diverse lifestyles and consequently need to be aware of cultural differences among clients and how these differences affect health-illness status as well as nursing care. To a large extent, the practice of nursing is based on contacts and social interactions betweeen the nurse and client. It is assumed that the nurse-client relationship and possibly the client's recovery or health maintenance status will be affected by the degree to which the nurse and client agree on such culturally shaped factors as what is health, illness, treatment, care, and cure.

How individuals and families experience health-illness situations or events is the basis for understanding and planning for nursing needs within each cultural context. Thus, knowledge of the client's cultural context, lifestyle, health beliefs, and health behavior can enhance nursing judgments and decisions. With such critical information, nurses will be able to understand when or how to intervene to prevent or alter untoward client

experiences. In addition, this cultural knowledge will help nurses develop a sensitivity to the cultural group and to recognize areas of potential stress, conflict, or incongruence for both clients and professionals. How cultural groups perceive and care for illnesses, how they promote and maintain health, as well as how the culture structures the health and illness systems is basic knowledge for efficacious health care for people.

Leininger (1978), a nurse-anthropologist and leader in the development of transcultural nursing, has defined transcultural nursing as "the study of different cultures and subcultures with respect to nursing and health-illness caring practices, beliefs and values, with the goal of generating scientific and humanistic knowledge and of using this knowledge to provide nursing care" (p. 94). She suggested that knowledge of specific cultural groups will provide the basis for construction and development of transcultural nursing theories which will offer perspectives about human health behavior. Analyzing specific cultural groups in relation to their health needs and health-illness beliefs and practices is viewed by Leininger as a basis for developing transcultural nursing care practices which are congruent with the client's lifestyle and prevailing values.

Other nurse-anthropologists have also urged a link between nursing and anthropology. Brink (1976) stated that "nursing's interest lies with the human being--whether ill or well--within a multitude of contexts. Whatever affects human behavior is of interest to nursing" (pp. 1-2). Osborne (1976) suggested there

is a need for nurses to become involved in the study of nursing practices in other cultures. He stated that "such studies will contribute to our understanding of our patients as psychological, social and cultural beings" (p. 12).

Research in nursing is still a relatively new endeavor and the profession is currently struggling with how to fit research and practice together. Diers (1979) stated that "research in nursing is generally considered to have two goals--improvement of patient care and the development of professional practice knowledge" (p. 14). Nursing research deals with both the professional ideology, i.e., theory development, as well as the utilitarian and pragmatic tasks of providing nursing services to people.

The nature of transcultural nursing lies at the conceptual crossroads of nursing and anthropology; concepts from both disciplines can be synthesized to generate knowlege that is useful in nursing care. This investigator utilized concepts from medical sociology that describe health behavior and thus have potential for explaining concepts or variables that may be associated with problems with which the nurse has to deal. From the standpoint of nursing research, this investigation may be considered a relation-searching study. Such methodologies have been described by Diers (1979) as exploratory and descriptive, for they describe variables, relationships or situations with the general form of the research question being "What's happening here?" Diers stated that "the general purpose behind these studies is to understand better a situation so as to know how to intervene in it, or how to

form one's prescriptions for care more accurately or acutely" (p. 126). This study is an example of nursing practice research in that problems that may be encountered in the care of clients from another cultural group were investigated. Furthermore, health and illness behavior of a particular cultural group in a special setting were examined. The variables studied include the economic and kinship systems, the community setting, and the over-all cultural context, as well as other factors that affect the health status of the group. This investigator aimed to discover new information about people in a particular setting with the notion that the more nurses know about their clients and how they experience things, the better able they will be to care for them.

For the purposes of this research, transcultural nursing is defined as "what transcultural nurses do." This position indicates that what transcultural nurses do changes as the context of nursing changes thus enabling the content of transcultural nursing to shift over time and place. Such a position is also action based in that it enhances the delivery of efficacious health care for people. If transcultural nursing is what transcultural nurses do, this investigation represents something of what transcultural nurses should know before they intervene in the care of clients.

Background and Overview

The challenge of providing culturally congruent health services, including nursing care, is most evident when viewed in an

intercultural perspective. Western-based[1] health care may be well-conceptualized, carefully planned, and systematically structured, but still may do little to improve the lives and health of the people. Patient care is usually provided under the auspices of health care institutions, which are composed of structures and people. The inter-relationships among clients, personnel and agencies are largely culturally defined. In addition, health systems exist as a part of the over-all social structure. If we as health professionals are serious about providing efficacious health care to people in other countries, we must examine all factors that influence health status and the delivery of care. For example, the relationship between poverty and health status has been well documented in the United States and other countries. Nurses need to examine not only the economic and political pre-conditions of health, but also how these factors influence nursing practice in other cultural settings.

Drietzel (1971) stated that the organization of health is a political problem and that any attempt to broaden the conception of health and illness to include sociological, economic and political considerations has usually been met with strong resistance. The process of "development" itself has many consequences both intended and unintended. Hughes and Hunter (1970) found in their

---

[1]The terms "western-based" or "scientific" health care refer to those theories and methods of medical and health care practices that arose in conjunction with the scientific tradition in the western world. The terms "indigenous," "traditional", or "lay" refer to the health beliefs and practices found within the local cultural group.

research of disease and development in Africa that the purposeful planning of social and economic progress in underdeveloped countries, often designed and carried out by experts from Western countries, was a risk to the health equilibrium of the people. The authors documented the role of development in fostering various diseases, social and economic disruption as well as the harmful consequences resulting from the processes of urbanization and industrialization.

Increasingly, within each country, the professional health care system is assuming responsibility to design and implement programs that are responsive to the needs and lifestyles of diverse cultural groups. As nurses begin to assume more responsibility for patient care within health care delivery systems, they will become responsible in terms of access and control over areas that have not traditionally been considered a part of nursing practice. They will need to develop new and more effective ways of helping clients adjust, feel better, recover more quickly, or live more fully. This means we must begin to broaden our conceptions of health and illness, and to begin to examine the intricate and complex relationships to the prevailing "social", "political" and "economic" conditions of life.

Many developing countries, including those in Latin America, are now giving priority to the extension of professional primary health care services to underserved populations. The expansion of new models of health care services relative to the growing needs of the population underscores how important it is for nurses to have

a broad basis for understanding and planning for peoples' health needs and problems. For example, the Pan American Health Organization (1978) has noted that

> . . . the present health care care system in Latin American countries often encounters cultural obstructions because of its highly indiscriminating infrastructure. In addition, clients have their own interpretation of health care and the indigenous system of health beliefs and practices may not accord with the professional system (p. 354).

Investigations of distinctions between lay and professional concepts of diseases provide health personnel with essential information as concepts about the cause of disease underlie the various actions taken to alleviate the symptoms. Recognizing the existence and nature of these conceptual differences consequently may help in planning and implementing ways to minimize the discrepancies. An understanding of the indigenous system of health beliefs and practices would enable nurses and other health care personnel to examine their own professional practices and their professional values, attitudes, and beliefs about health care. Health care professionals should be able to work within the context of other cultural frameworks and not be guilty of professional hegemony, such as imposing their own health ideas and systems of care on the people they are supposed to help.

However, any examination of cultural beliefs and practices needs to be conducted on several levels. For example, health professionals' knowledge of how to prevent and treat protein-calorie malnutrition does not necessarily assure that the incidence of this disorder will be reduced. Nor does the availability of appropriate

foodstuffs assure that these foodstuffs will be used. Factors such as persistent adherence to traditional diets lacking appropriate nutrients, biases against using certain foods, and perhaps most important, lack of understanding about the relationships between food and disease can greatly affect the situation. Economic constraints play an important role; in addition, governmental apathy and lack of organizational planning can present considerable problems. There seems to be little doubt that the incidence of such malnutrition is related in part to such factors (Fonaraff, 1975; Jelliffe, 1962; Scrimshaw, 1974). The influences of cultural beliefs and practices, when viewed within the context of the social system, shape behavior in regards to immunizations, preventive health practices, contraceptive behavior, utilization of health practitioners and many other areas of health care.

Just as frequently, intracultural or subcultural differences tend to coincide with socioeconomic variations, such as differences in education, occupation, income and ethnic group. The literature about a wide range of diseases shows that different theories about their cause, prevention, and treatment are held by lay and professional people, and that there is considerable variation among the professionals themselves (Nash, 1967; Paul, 1955; Saunders, 1954).

The variations in health-illness beliefs and practices are largely culturally determined and the introduction of new models of professional health care into different cultural settings ultimately raises issues of concern for both providers and consumers of care. Anticipatory planning prior to the establishment of new

health services is a shift from a curative approach to one that seeks to enhance and promote health. For professional nurses, it requires an attempt to understand the local health beliefs as they influence health behavior as well as the lifestyles and the human conditions of each cultural group in order to provide nursing care that is relevant and germane within the cultural context.

A number of investigators have discussed various approaches to investigating illness behaviors within the socio-cultural context. Mechanic (1968) viewed illness behavior in relation to the cultural, social, personal and situational patterns which lead to the various ways in which persons perceive, evaluate, and act with reference to bodily indications. He stated:

> . . . cultural patterns and typical ways of life give substance to the manner in which illness is perceived, expressed and reacted to. To some extent, the cultural context defines that conditions are recognized, the causes to be attributed to them, and which persons have legitimate authority to assess and define such conditions. Similarly, cultural definitions influence the consequences of being defined as having a particular condition (p. 52).

Leiban (1977) suggested that the concepts of disease in each society are the cultural classifications of adversity. Causality is in the relationship between the victims of illness and their surroundings as this relationship is culturally interpreted. The reactions of an ill person to his symptoms may express important cultural values, traditions, beliefs, and practices of his society.

Goodenough (1963) offerred a definition of health beliefs that was utilized in this investigation. He defined health beliefs as those propositions accepted as true about the causes, symptoms and

remedies related to wellness and sickness. Implicit in the health beliefs of all cultural groups is some concept of "normal" fitness and behavior. Ideas of health and acceptable behavior, as well as those of disease or illness, depend on many factors within the social and cultural environment. Certainly the existence of health care facilities, the level of health science, as well as the social and cultural context within which human behaviors are characterized all contribute to the ways that health and illness are defined.

Fabrega (1973) suggested that every illness state that is experienced leads to an evaluation designed to establish the meaning and/or significance of that particular illness. Decisions about what to do when sickness occurs are based on the understanding one has about what is being experienced and the meaning assigned to it. Once health deviations have been noticed, evaluated and explained, behavioral changes associated with the illness occur. Fabrega proposed a model to assess this decision making process. The model attempted to depict in an abstract way fundamental behavioral changes associated with an occurrence of illness and to account for the decisions that are made by a person during the time he is ill.

Chrisman (1977) described the "health-seeking process" as a means to document natural histories of illness and how sociocultural factors influence the behaviors related to sickness and health. Health seeking behaviors are those steps taken when a sick individual perceives a need for help and takes action to solve a health problem. These steps were conceptually differentiated as elements in the health seeking process: a) symptom definition; b) illness-

related shifts in role behavior; c) lay consultation and referral; d) treatment actions; and, e) adherence. Symptom definition was based upon evidence that the nature and quality of perceived changes in individual health status are the major determinants of subsequent actions. Factors such as symptom visibility or frequency of appearance, along with the sociocultural factors of danger and disability were associated with this variable. Chrisman suggested that the individual's symptoms and their shared meanings with family, friends, and significant others influence the way a person modifies specific roles during illness. Lay consultation and referral involves health beliefs and practices, lifestyle of the sick individual and the social network of significant others. Chrisman stated "these activities imply the existence of shared beliefs and practices and the presence of individuals available to influence the sick person's decisions about what to do" (p. 358). Treatment action discriminated between type of treatment and source of treatment advice. Adherence was viewed as the degree to which the sick person acted upon treatment advice. The health seeking process was proposed to guide the conceptualization of a number of interrelated events that occur when illness is perceived. The relationships among the conceptual elements and the cultural and structural features of daily life were suggested so that illness may be seen from the participant's view.

A number of investigators have studied what has become known as lay and professional referral and consultation systems. These are the health seeking and consultation processes related to the

patterns of choice among potential health consultants as well as the context of consultants' responses to the sick individual.

Friedson (1961) described the lay and professional referral systems with which the person interacted when illness occurs. The referral system was predicted on a patterned sequence of four steps through which individuals pass. Friedson's model was designed to indicate the relative likelihood that persons would consult a professional practitioner in addition to others. The fourth sequence was designated as the professional culture and is equivalent to modern medical culture while all other health practitioners are part of the lay referral system. Friedson suggested the probability a professional physician will be consulted for a particular health problem is related to a) the degree of congruence between patient's health beliefs and those of the physician, and b) the degree of cohesiveness of the social group of which the patient is a member. Those social groups with localized and cohesive groupings of kin and friends are "parochial". Those groups with loose, dispersed social and kinship networks are "cosmopolitan". The cosmopolitan groups, usually middle or upper class persons, are assumed to be familiar with professional medical qualifications and possess the ability to make decisions about medical care without advice from lay consultants outside the household. The parochial group has limited connections with medical institutions and are not familiar with the vast range of medical services. They lack the ability to seek medical care alternatives and are dependent on advice from others. This model, in addition to assuming a linkage into

the professional medical care system, presumes that professional health care is available and that potential patients have financial access to it.

Numerous researchers (Ailinger, 1979; Demers, Altamore, Mustim, Kleinman & Leonardi, 1980; Polgar, 1963; Scott, 1974; Weaver, 1970) have examined illness referral systems of various U.S. based populations. Although the authors have differed on how the referral system is defined, all have attempted to show how cultural and social factors play a significant role in shaping this process.

Ailinger's study was of particular interest because it involved persons whose parents had immigrated to the United States from Latin America. Three phases of illness referral system were defined. First, there was extended use of self-treatment. Second, referrals were made to the social network, particularly to people from the same country of origin. Finally, referrals to the professional medical system were made, usually to those professionals with the same cultural heritage. Most illnesses reported by families did not go beyond self-treatment. Cultural influences including language, social network and priorities of daily living were related to the alternatives selected by families when illness incidents occurred.

In summary, the influence of culture on human behavior greatly influences how people react to both health and illness, yet the significance of cultural influences on clients' behavior is seldom recognized or taken into account by those responsible for providing health care services. In addition, nurse researchers must begin to examine critically the socio-cultural context within which health

and illness exist. If those nurses serve have no hope of improving their health status, professional nursing goals and hopes are also not within reach.

Purpose

The purpose of this research was to explore selected health-illness beliefs and practices of Indian households living in a colonia[1] in Quetzaltenango[2], Guatemala. Beliefs and practices regarding commonly experienced illness manifestations and the resulting health-related behaviors that occur when individuals experience illness were examined. Certain variables within the cultural context such as the daily lifestyles, family and kin relationships, living arrangements, and the economic circumstances of urban poor Indian culture were explored as they related to health, illness and recovery processes.

A prospective study with an urban Indian population was conducted for a number of reasons. First of all, it provided an opportunity to investigate health and illness within families over a period of time in their natural environment. Second, relatively little is known about urban Indians in Guatemala as previous work has been focused on populations living traditional lifestyles in more rural areas. Last of all, it was assumed that this population is experiencing considerable social and cultural change. How they experience and manage illness within the framework of their daily

---

[1]A colonia in Guatemala is a politically defined urban settlement.

[2]Quetzaltenango is also spelled as "Quezaltenango."

life activities is not known. Their life situations and circumstances differ from traditional Indian life in Guatemala since they reside in an urban setting and have been exposed to the influences of the larger society. It was anticipated that cultural adaptations have occurred and there was some lessening of traditional health beliefs and practices. However, what cultural practices are changing, how rapidly, and why they are changing is unknown. More specifically, changes in knowledge, beliefs, and practices in health care are not known. Various dimensions of these issues were explored.

Specific Aims and Research Questions

The specific aims were to explore with an urban Indian population those domains within their cultural context that have relevance for nursing practice. The investigation was broadly based and explored factors relating to individuals, families and community. The overall concern was What do nurses need to know and understand about this group of people and their life situation to plan and implement efficacious health and nursing care? Of particular interest to the investigator were the health beliefs and practices, the daily life styles and the "way of life" as they relate to health, illness and recovery processes.

The specific research questions were:

1. What are important health-illness beliefs and practices of this particular group of people?

2. How does this group perceive and utilize Western-

based[1] health care?

3. What is "being sick" like for individuals in this cultural group?

4. How does this group of people manage illness?

5. What is the context of social relationships between the ill person and those he or she turn to for advice and assistance?

6. What demographic variables, health beliefs and practices, illness experiences, or other factors are associated with selection of health care alternatives?

The Setting

In keeping with one of the general themes expressed thus far, the importance of nurses and other health care professionals to have a broad perspective and background knowledge of the country and the culture in which they find themselves this section provides an overview of the country and the city in which this research was conducted. It is an attempt to offer a holistic view and to furnish the reader with some understanding of the country and the life situation of the people who live there.

Guatemala

Guatemala, with a population of 6.6 million people, is the most populous of the six small Central American countries. The country contains three distinct cultural groups--the Mayan Indian, the Ladino and the Black Carib; each has a totally different origin. The Black Caribs occupy small areas on the eastern coast of the country. Urban

areas around Guatemala City, the capital and the eastern coast of Guatemala are primarily populated by Ladinos--the Spanish speaking majority, while the Indian populations tend to reside in more rural areas, particularly the central and western highlands (Glittenberg, 1978).

The Guatemalan highlands run the length of Guatemala from the northwest to southeast, constituting a mountain plateau that has elevations up to 10,000 feet. The highlands are deeply disected and wrinkled mountain masses composed of limestone with volcanic intrusions. The climate is cool with heavy summer rainfall. The lowlands, on the other hand, have a flat topography; the climate is hot and tropical with very heavy precipitation during the rainy months (Vogt, 1967).

All of Central America has experienced repeated and inevitably tragic seismic upheavals. Earthquakes destroyed Guatemala's first two capital cities, each time forcing the government to rebuild on a new site. The most recent earthquake in Guatemala occurred on February 4, 1976, killing 30,000 people and leaving many more homeless (Gondolf, 1981).

Guatemala, along with Southern Mexico, was once the site of the great Maya Indian civilization, which flourished for several centuries before the Spanish conquest, and, for causes that are still being debated, declined before the arrival of the conquistadores. The territory was conquered for Spain by Pedro de Alvarado in 1524 and became part of a colony which included all of contemporary Central America and adjacent portions of Mexico (Jones, 1966).

In 1821, Spain granted independence to Guatemala and it joined the Central American Federation of El Salvador, Honduras, Nicaragua and Costa Rica. Since the dissolution of the Federation in 1840, Guatemala has experienced a turbulent political history characterized by a series of dictatorships, representative governments, revolutions and counter-revolutions (May & McLelland, 1977). At the present time, the country is governed by a president elected for a single four-year term. He appoints a cabinet of ten ministers, including a Minister of Health. The country is divided into 22 departments (See Figure 1), each of which has a designated departmental capital city. Each department also has a departmental director of health.

Modern Guatemala is influenced by certain geographical and historical conditions which are probably not unique to Guatemala, but are fundamental to understanding the present situation. Lomnitz (1977) indicated that most Latin American cities were founded by the Spanish between 1520 and 1580 and these larger cities, especially the capital cities, have dominated the Latin American political and economic scene since the Spanish Conquest. This pattern of urban dominance in Guatemala continued to be reinforced after independence from Spain, and especially during the early part of the present century, with the centralization of power under the Cabrera and Ubico governments.

The political situation. In an analysis of the political power structure of Guatemala, Adams (1970) has observed that following independence in 1821 Spanish influence declined, but

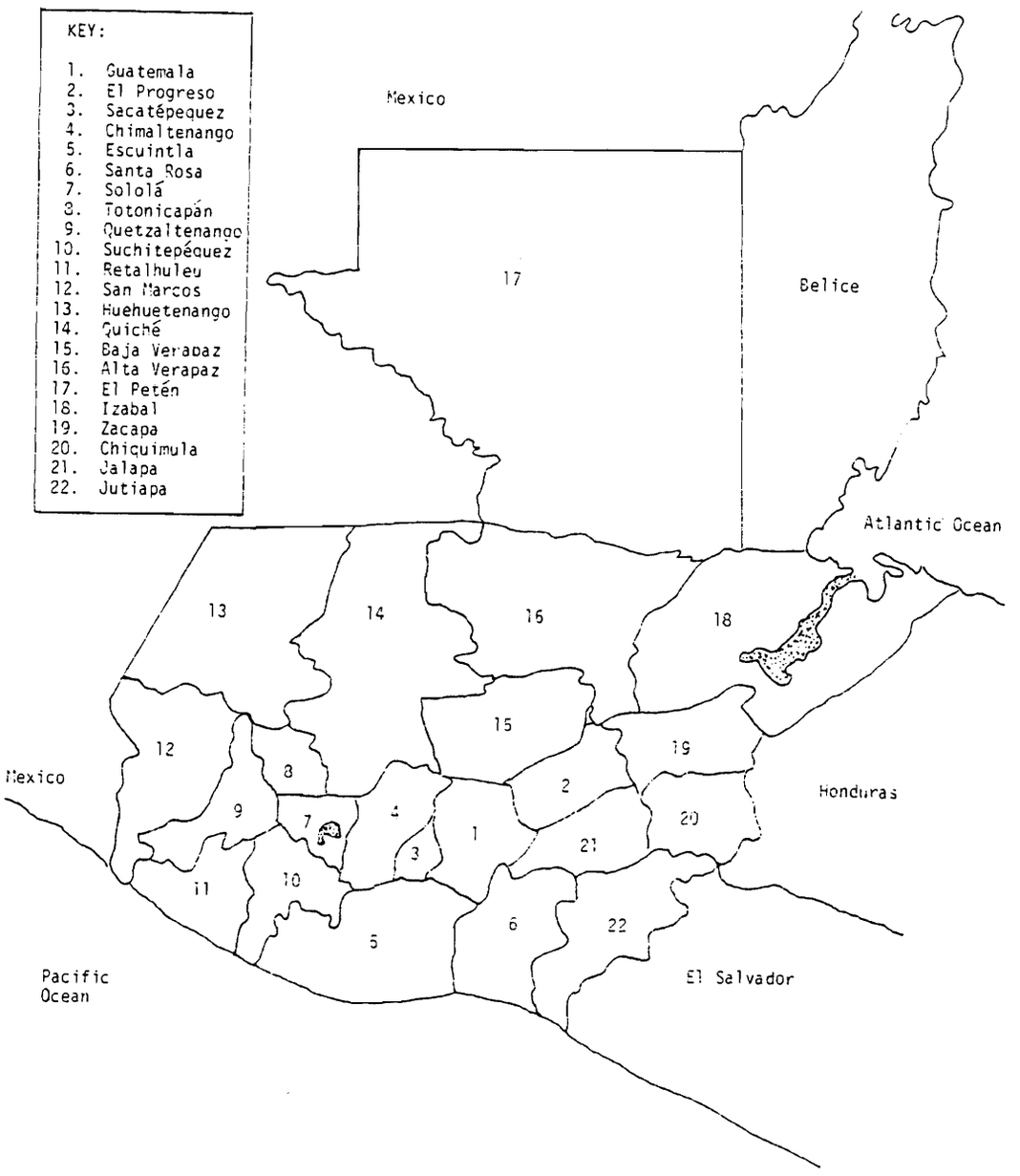


Figure 1. Map showing departments of Guatemala. Adapted from Ministerio de Communicaciones y Obras Publicas, Guatemala C.A., 1979.

England, Germany and the United States became increasingly interested in Guatemala. World War II ended the German commercial dominance (which was related primarily to the growth and export of coffee) and vastly increased the influence and control of the United States. The interest of the United States government in Guatemala has been expressed in various ways, through direct and indirect military assistance and through extensive and continuing economic aid. In addition, the United States has many extensions of interest in Guatemala besides the commercial and industrial concerns. Adams (1970) stated that "explicitly and continually, there has been a concern with trying to stem political radicalism, and a great many of the other efforts are subordinated to this issue of gaining 'stability'" (p. 141).

According to Adams (1970) at the present time, the country has been in a state of clandestine civil war for over two decades. Guerrillero (anti-government forces) have been active in Guatemala since the early 1960's. Adams (1970) believed this situation has occurred in part because of the "open support of many socialist nations for the guerrillero forces and because Cuba makes a public foreign policy of encouraging as much internal activities in its neighbors as possible" (p. 112). Certainly, on the other hand, the United States has not remained entirely neutral, instead choosing to support the Guatemalan government with both the economic and military means to suppress anti-government activities.

The situation is steadily deteriorating and has been accelerated by recent developments in neighboring Nicaragua and El Salvador.

The overthrow of the late General Anastasio Somoza Debayle in Nicaragua has spread revolutionary influences throughout all of Central America.

Population growth and land resources. Guatemala also presents other developmental or structural features of an important social nature. As is the case in all of the Central American countries, Guatemala's population is rapidly growing. It is a small country, and according to recent statistics the population growth rate is approximately 3.0 percent, such that the population is expected to double in twenty-three years. Given that the current population is over six million, this means at least twelve million persons by the end of this century. Any improvement in socioeconomic development is threatened by the rapid rate of population growth (Arias, 1976). The population is continuing to grow and the causes are generally attributed to the effects of public health on the death rate in a situation where the birth rate has not significantly declined (Adams, 1970).

One of the effects of the expanding population within a small land base has been internal migration from the broad highland area from the Indian west through the Ladino (the Spanish speaking majority) east to the urban centers, with the majority of migrants being of Ladino origin. Adams (1970) stated that "this migration is almost entirely Ladino in composition, either because they were Ladinos when they arrived or because they have converted to being Ladinos since their arrival" (p. 135). This process of trans-ethnic "passing" or ladinoization is a rapidly growing social phenomenon

in Guatemala.

Guatemala's land problems have become intensified with the increase in population. It is the classic problem of most of the land being in the hands of too few. The majority of campesinos (farmers or peasants) in Guatemala are subsistence farmers. They usually have small plots--sometimes less than one-half acre along the slopes of deforested and eroding mountainsides. The growth rate shown in agriculture for the past few decades illustrates that export economy rather than the subsistence sector has shown the greater increase (Adams, 1970).

This effectively means that in a small country with scarce land resources and an expanding population, the major portion of arable land is used to grow cotton, coffee, or other crops for exporting to Europe or the United States. Fifty percent of Guatemala's export crop is coffee, while cotton is second (May & McLellan, 1972). Cotton has been a lucrative business, bringing rapid profits to a small segment of the population; however, it is currently destroying vast segments of land without crop rotation and proper cultivation. The uncontrolled use of insecticides and the absence of even minimal safety precautions have long been a source of concern to only a very few.

Adams (1970) found that "conservation is not a strong philosophy in Guatemala and certainly has taken a back seat to rapid profits" (p. 376). He indicated that past efforts at agrarian reform and colonization have been far from ideal. A major problem has simply been getting access to the land. Long-term credit is

hardly available, and, for the subsistence farmer, it is out of the question.

Ethnic groups. Glittenberg (1978) has indicated that the social structure of Guatemala is complicated by the existence of a "quasi-caste" system represented by Ladino and Indian ethnic groups. The Indians are the racial and cultural descendants of the Maya-Quiche tribes, pre-Colombian inhabitants of Guatemala; the Ladinos are a racially, culturally varied group (usually mixed Spanish and Indian descent) identified primarily by language and residence. The Indian populations, estimated at around two and one-half million people, live primarily in the highland area that extends from Guatemala City north and west to the Mexican border.

Glittenberg (1978) noted that "in recent decades, the Indian comprised a majority of the population, but today the Ladino represents 56.3 percent of the population. It is unlikely that the increase in the proportion of Ladinos is due to natural increase, but rather to the process of 'ladinoization'" (pp. 419-420). This is basically the way in which an Indian "passes" into the Ladino class by changing his language, dress, customs, residence, occupation and sometimes, religion. Indicators of traditionalism have been seen by a number of investigators (Tax, 1952; Sexton & Woods, 1977) as the use of traditional clothing and the native Mayan dialect rather than Spanish.

Residents of each Indian community have traditionally maintained distinctive traje (modes of dress.) Bunch and Bunch (1970) stated that:

> . . .the variety and colorfulness of these trajes is almost without rival elsewhere in the world; more than one hundred different traditional outfits are worn in an area the size of New Hampshire. Still largely woven on traditional backstrap looms, these clothes vary in shape, color, design, type of weave and method of use, all depending on the home town of their wearers (p. xi).

In a few communities, men still wear the traje, but the use of the traje is more common among the women. However, even some of the women are now beginning to change to more western-style clothes.

In the more rural areas, nearly all Indians speak one of the eighteen or more Mayan dialects still in use today. The majority of rural Indian men speak some Spanish; their fluency varies according to their contact and exposure to Ladino culture and travel. Some rural Indian women speak no Spanish because their lives have primarily been oriented to rural village life with little outside contact. This picture is changing rapidly because of migration, seasonal labor patterns, army service, increased travel and exposure and availability of formal education; Spanish is now predominantly the language of all Guatemalans. Indeed, in some areas of Guatemala, such as Quetzaltenango City, is is not unusual to encounter Indians who speak only Spanish.

Illiteracy. Guatemala also contains over two million persons, or 54.4 percent of the population above school age, who are classified as illiterate by the Guatemalan government (Mas de 2 millones Los Analfabetos, 1980). According to the 1973 census, only 48 percent of the population aged seven to fourteen attend school, despite the fact that attendance is obligatory at these ages. Less

than half (48 percent) of the population ten years or older can read. While the percentage of literates is up to 71 percent in urban areas, it is only 30 percent in rural areas (Arias, 1976).

Bertrand, Pineda and Soto (1978) summed up the literacy dilemma in Guatemala by stating, "Guatemala is confronted with a great need to improve the level of education for the population as a whole. At the same time, the constant increase in population makes this goal ever more difficult to obtain. If the population is to double, it will be necessary to double the investment in education as well, simply to maintain the current educational levels" (p. 14). Recently, the government announced a four-year plan (1980-84) to combat illiteracy (Mas de 2 millones Los Analfabetos, 1980). Ewald (1967) stated that "in Guatemala formal education of the Indian is recognized as an important means to national integration. 'Education' signifies, to a great extent, the transmission to the Indian, and his adoption of, Ladino culture and values (p. 443).

Health conditions. As in many other developing countries, the multiple health problems in the population are a source of concern in Guatemala. Bertrand et al. (1978) suggest that one crude measure of the health of a country is its infant mortality rate. They observed that infant mortality has been steadily decreasing in Guatemala, but it is still higher, at 79.2 per thousand in 1973, than in other Central American countries. Enteritis and other diarrheal diseases were the second leading cause of death in Middle American countries in 1975, with accidents ranking in first place (Pan American Health Organization, 1978). The crude mortality rate

of 12.5 per thousand (1973) also reflects the health status of the nation. Differential rates exist between urban and rural areas with the rural areas showing higher mortality (Bertrand et al., 1978). According to the Pan American Health Organization, the average life expectancy in 1960 was only 49.4 years, in 1972, it was 52.4 years (Pan American Health Organization, 1978).

Malnutrition is one of the most serious health problems of Guatemala. Arias (1976) stated:

> . . .a total of 81.4 percent of the population under five years of age is malnourished; 49.0 percent with grade I, 26.5 percent with grade II and 5.9 percent with grade III malnutrition. As of 1975, the total number of malnourished children was estimated at 849,000 (p. 147).

The situation is complicated by the fact that the good land is already under cultivation for export crops, as previously noted, coffee, cotton and bananas, primarily. The use of improved technology to increase productivity does not lend itself to small-scale efforts or subsistence farming, on which a large segment of the Guatemalan population depends.

As in most of Central America, corn is the agricultural crop of greatest importance. It is cultivated mainly on small subsistence farms. The basis of the Guatemalan diet is corn in the form of tortillas (May & McLellan, 1972). The corn is boiled and softened in lime water, dried, then ground and baked in tortillas; or in some areas of Guatemala, tamales are preferred. Black beans and/or rice with various condiments are usually served along with sweetened coffee. Even the very young children drink coffee with meals or snacks.

Economics. The economic situation of persons is difficult to evaluate; beggars are a common sight on most streets and in front of churches. Shantytowns and squatter settlements abound on the fringes of Guatemala City and the situation of many persons in the rural areas is obviously desperate. Adams (1970) made an important point when he stated that "wages in Guatemala, however, are not consistent or constant in any respect except that they are extraordinarily low" (pp. 383-384). Adams suggested that wages, while increasing, still fall far below that which might be expected of a developing country. Wage and income situations vary considerably in Guatemala and the data are fragmentary and incomplete. In 1980, a minimum wage law of Q107.00[1] per month was enacted, but few employers pay the minimum wage. A work week usually consists of six days, ten or more hours each day. The situation obviously varies depending on type of employment and place; wages are usually higher in Guatemala City, but so is the cost of living.

The City of Quetzaltenango

Quetzaltenango, located at an altitude of 7,658 feet in the central highlands of western Guatemala, is the country's second largest city, with a population of some 196,000 inhabitants (Office of the Mayor, Quetzaltenango, Guatemala, 1980). It is known as "the Indian city", as the majority of it's citizens are Indian and reflects its Indian heritage in that the Indian name

---

[1] In 1924, parity was established between the Quetzal and the United States dollar (Jones, 1966). At the present time, one quetzal (Q1.00) equals one U.S. dollar ($1.00).

Xelaju, or simply Xela, is used by Guatemalans more frequently than Quetzaltenango.

It is the capital city of the department of Quetzaltenango (See Figure 2). At the time of independence in 1821, Quetzaltenango was already the major city in the highland area. According to residents, it has always been known for its traditional and conservative views. Adams (1970) said that "it is the only place in Guatemala where Indians have emerged as holders of economic power in their own right, forging a new kind of Indian middle and upper strata society" (pp. 166-167). However, Adams was careful to point out that economic control within Quetzaltenango does not imply political power or leverage within the political scene in the country as a whole.

Many of the residents are small shopkeepers and business owners. There are a number of small factories in Quetzaltenango, each of which employs a moderate sized work force. Quetzaltenango is the center of what has been described by Nash (1967) as a solar market system. A major market center is in daily operation. Into it flows commodities produced throughout the region, goods from all over the nation, and even items from international trade. This particular system of regional interdependence is characteristic of the western highlands of Guatemala. Nearby communities, such as Almolonga and Zuniel, are settings for rather large scale vegetable farming. Such produce, along with animals, fruits from the coastal areas, textiles and other goods from specialized communities, comprise the basis for the market. Prices are stated, but the

Figure 2. Map showing the Department of Quetzaltenango. (Adapted from Ministerio de Communicaciones y Obras Publicas, Instituto Geografico Nacional, Guatemala, C.A., 1979).

customer is expected to barter for the goods he wishes to purchase. Anyone who pays a small fee can enter the local market, set up a small stall and sell goods.

Quetzaltenango has two major seasons--wet and dry; since the city itself is located at a high altitude; mornings, late afternoons and evenings are always cool. Quetzaltenango is laid out in the pattern of many Latin American cities with the central part of the city containing the center of government, business and social activities. There is a large and beautiful central park, a majestic old cathedral, six banks, many restaurants, a number of hotels, and two movie theaters. One recent travel brochure (Livesey, 1979) admitted many travelers found it to be a city of "deprived sophistication." In spite of the number of inhabitants, one has the impression of being in a small town. The narrow cobblestone streets and old homes and buildings add to that impression. Most business ventures necessitate trips to the capital, Guatemala City, which is approximately a four-hour drive over mountainous roads. Bus service is frequent and brisk between the two cities.

The city is divided into zones and further sub-divided into various sections known as colonias, and barrios. The city has an urban transportation service; everyone patronizes the downtown shops and one of the two major food markets.

There is some antagonism and rivalry between Quetzaltenango and Guatemala City. Local residents are quick to point out that there has never been a President of Guatemala from Quetzaltenango, even though it is the country's second largest city. They believe

the President always favors his birthplace, at least in terms of public work projects during his term of office. Years ago, there was a railroad from Quetzaltenango to the coast. Some residents say that because it was financially successful, the government in Guatemala City became concerned, and fearful that Quetzaltenango might eventually rival the capital, discontinued the railroad. It should be noted however, that less emotionally involved observers have documented that the railway was a financial boondoggle and never lived up to its potential (Jones, 1966).

Metropolitan Guatemala, or Guatemala City, has received migrants from every department in the republic, although major inputs have been from Quetzaltenango. The migration is again primarily Ladino, or has become Ladino upon arrival in the capital. At the same time, Quetzaltenango receives Indian migrants from the Pacific coastal areas and from the northwest highlands, particularly the department of Huehuetenango.

There is an ever-present tension between the Ladino and Indian population[1]. Ladinos, who consider themselves the descendents of of the Spanish conquistadores, are often disturbed as they see more and more of the Indian population owning homes and new automobiles, buying commerical establishments and sending their children to previously "Ladino only" private schools. There are two universities in Quetzaltenango, the University of San Carlos and Raphael

---

[1]For a more complete analysis of Ladino-Indian relationships, see Hupp, B.F. The urban Indians of Quezaltenango, Guatemala. Unpublished master's thesis, University of Texas, Austin, 1969.

Landivar University. Indian students are attending classes at both universities and are graduating to occupy professional positions as lawyers, university professors, accountants and teachers. Hupp (1969) stated that in Quetzaltenango, "being an Indian is an ascribed rather than achieved status: a person is either born Indian or he is not. The traditional use of cultural and liguistic criteria is irrelevant. . .Part of being Indian is occupying a subordinate social and political position" (p. 179). For Quetzaltecan Indians to successfully complete the trans-ethnic process of Ladinoization they would need to move to Guatemala City where their ancestry is unknown.

As a city, Quetzaltenango reflects other social phenomenon that have been described in the wider society. While a significant number of Quetzaltecan Indians are successful in various business ventures, many other Indians and Ladinos live in poverty. Specific statistical data are not available for illiteracy or educational status for residents of the city, but it is not uncommon to encounter adults who cannot sign their names or children who do not attend school. The same situation undoubtedly holds for malnutrition; many persons simply do not receive sufficient food. Beggars, both adults and children, are a common sight on the street corners, standing in front of churches, or begging door-to-door.

Anti-governmental forces are active in the department; so far, the major part of their activities have been concentrated in the rural countryside, although university professors have been targets of assasination as have other residents of the city. The city

usually appears calm and tranquil, with the major activity occurring at the market center, but, on occasion a sense of anxiety pervades the atmosphere.

As other cities, Quetzaltenango is a place of striking contrasts. Some houses could correctly be called mansions; others tin shacks. It is the setting for two major universities, yet a large portion of the population can neither read nor write. Cadillacs and Porsches speed past donkeys and men carrying heavy cargo with tumplines[1]. A curandero practices traditional medicine one block from the office of a Harvard-trained physician; both have waiting rooms overflowing with patients. Banks and businesses bustle with customers; manual office machines are used because the electricity is undependable. One may dine on gourmet food at one of the larger hotels or purchase tortillas and beans from a street vendor.

Taken as a whole, Quetzaltenango is a beautiful city; the people are friendly and helpful to outsiders. As Casagrande (1976) stated, "to come as an inquisitive stranger to live among alien people is an audacious undertaking and the successful outcomes of field research depends not only on the anthropologist's skills, but also on the capabilities and interests of those who teach him their ways" (p. 48).

---

[1]A tumpline is a piece of leather which fits across the forehead just below the hairline with rope extending from both ends of the leather band. A load is then tied with the rope which places pressure on the top part of the head and forces the man to walk slightly bent over, so the cargo can rest on his back.

The Colonia San Marcos

San Marcos is a small colonia located on the northern periphery of Quetzaltenango. It contains 218 dwellings, with possibly another 10-12 under construction. Its inhabitants are not squatters, nor is it by definition a shantytown. The majority of residents own, or are buying, their property. It is the "poorest" area of the city and occupies an area approximately one and one-half miles in length and three-fourths of a mile wide. Its southern side is a large ravine that runs the length of the colonia. Five years ago the first bridge was built across the ravine, allowing residents access to their homes by car directly from other parts of the city. During the past year, a second bridge was completed across the ravine, permitting two entry points to the colonia.

The colonia consists of two parts, usually referred to as the "small side" and the "large side." They are separated geographically by another deep ravine with a bridge that serves as the crossing point between the two sides of the colonia. The ravines are dry except during the rainy season when they have up to two or three feet of water in them.

From an administrative point of view, San Marcos is reckoned as an integral part of the city of Quetzaltenango. There are two churches, Catholic and Evanjelical (Protestant); one school--grades one through six; some urban utilities and transportation services. Many of the families operate small tiendas (stores) within their homes and sell a variety of merchandise. In addition, there are a number of small businesses within the colonia, including three

bakeries, a meat store, a public bath, a block and tile factory, one tailor, and a number of carpenters and mechanics who have small shops adjacent to their homes.

Spaces between homes have been left in more or less their original state--dusty and unkept. The bottom of the ravines serves as a trash and garbage dumping site, not only for the residents of San Marcos, but for the rest of Quetzaltenango as well.

The majority of homes are made of adobe; some are painted--blue, pink, green or white. The new homes are constructed of cinder block. The colonia has no paved streets, no drainage system, and no gutters. There are four street lights, their bulbs always seem to be non-functional and residents complain that the municipalidad (city administration), never replaces them. There are no telephones and no garbage collection. Any waste liquids are thrown outside the houses and trickle down the streets. Children and men urinate in public in front of homes and stores. Two homes in the colonia have "in-door" flush toilets, all others have privies in their patios or adjacent fields. Pigs, chickens, and a few cattle and sheep wander the streets, along with any number of stray dogs.

They are two public water faucets, one on each side of the colonia. Some families walk a half-mile or more to obtain water for household use. Many women take their clothes to a community pila (public washing facility) furnished by the city. The nearest pila is two miles from the colonia. Other women pay to use washing facilities in homes that have running water where clothes can be scrubbed by hand and taken home to dry. Many of the homes

that are built on the slopes of the colonia are without water during the daytime because there is not sufficient water pressure to force the water uphill to their homes. The women rise as early as 4:00 a.m. to do their washing when the water pressure is adequate to ensure a sufficient supply of water. According to a survey conducted in June, 1980, only 43 percent of the homes in San Marcos had running water.

During the rainy season, from April through September, the streets are quagmires of mud. Other times, they are dry and dusty. It is not a pretty place when compared to the rest of the city. San Marcos is not shown on any of the maps of Quetzaltenango and many long-time residents of the city have never crossed the ravine into the colonia.

Summary and Conclusions

To summarize, it can be said that Guatemala presents many of the health, social, economic and political phenomena encountered in other developing Third World countries. The country's second largest city, Quetzaltenango, was chosen as the research site for this study because it contained a large urban Indian population and the cultural setting was such that the variables of interest to the researcher were present. The entire country is currently undergoing considerable political, socioeconomic and cultural changes; western-based health services are available to people who reside in the urban areas.

At present we know much less about the cultural, social

and psychological aspects of health than about the purely technological aspects. As nurses, we know that we can successfully plan the clinical aspects of an immunization campaign or a pre-operative teaching program. What we do not always know is how our services will be received (or rejected) by our clients, or why. The basis for understanding and planning for health and nursing needs is a more complete understanding of how people experience situations that relate to both health and illness. With such information, nurses will be better able to understand when and how to prevent untoward client experiences.

This investigation explored various health beliefs and practices of urban poor Indians as they relate to health, illness and recovery processes. The experience and management of illness within the cultural context and the framework of daily life activities were of particular interest. The overriding goal was to discover new information about this particular group of people that will enable nurses to provide care to clients within their cultural setting with a minimum of disruption to their lives.

CHAPTER II

THE INDIANS OF GUATEMALA

Introduction

The rationale, purpose, specific aims, and research questions that will serve to guide the course of this study were discussed in Chapter I. It has been proposed that a contextual grounding of human actions is necessary for understanding people and the settings within which their actions have meaning. As part of this process, an understanding and appreciation of the historical context is required. A brief overview of Guatemala and the research site, Quetzaltenango, has been provided. This chapter contains a review of the literature and is designed to provide the reader with background information about the historical processes that have occurred in Guatemala and something about the people who live there, in particular, the Indian populations because they are the focus of this research. Selected aspects of Indian culture that are germane for health professionals are reviewed. These include descriptions of traditional family and community life, cultural change processes and traditional health and illness systems.

The second purpose is to describe the geographical position of Central America and to provide a basis for understanding health beliefs and practices, as they relate to the social context, the

diversity of lifestyles, and the social changes that have occurred over time. This chapter is an effort to place the contemporary reality against the background of the social, cultural and historical conditions that helped to create it. It is an attempt to argue that health professionals must not only know the human conditions and lifestyles of clients, but must understand how and why they exist.

Terminology: Multiple Terms

A discussion of ethnic and geographical terminology is necessary prior to a review of the literature. It is possible to distinguish two major types of divisions in the geographic classification of the native cultures of America which encompass the whole Continent. Based on political geography, the Continent is either divided simply into North and South America or a third part is interposed between the two. This third portion, whether it be "Mexico and Central America", or as some North American anthropologists call it, "Middle America", is a distinction that is helpful for a particular focus on that geographical area. Both types of divisions present problems when they are used for anything more precise than a geographical location.

For example, in the first classification, the North-South division, the geographical dividing line is between Nicaragua and Costa Rica. Everything from Costa Rica south is South America, while everything to the north, including the remainder of Central America and Mexico, is North America. Kirchoff (1952) stated that

"in such a classification there are cultures in South America as diverse as those of the Fuegians, the Caribs and the Inca. On the other hand, the remaining cultures of Central America and Mexico do not exhibit many "North American" characteristics" (p. 18). The author believes that the cultures of Central America and Mexico have more in common with certain South American cultures than with any in North America. At the same time, some similarities with cultures in the North American Southwest cannot be ignored.

Kirchoff (1952) has shown that dividing the Continent into three major areas such as North, Middle and South America also presents problems. Cultures of Middle America--(Mexico and all the territory to the eastern border of Panama)--are not that different from the other cultures of the Continent. He observed that far from considering Mexico and Central America as a cultural unit separate from the other divisions of North and South America, we have continued to recognize the basic division between North and South America by assigning certain cultures of this middle region to North America and others to South America.

The term "Mesoamerica", proposed by Kirchoff (1952) is based on geographical, ethnic and cultural delineations at the time of the Spanish Conquest. ("Mesoamerica" refers to both the Native American pre-historic and high culture societies who were present at the time of the conquest.) It is a region whose inhabitants were united by a common history which set them apart as a unit from other tribes on the Continent.

A further complicating factor is that often cultural

characteristics of both Middle and South America are defined as "Latin". This term is usually related to those peoples or countries using Romance languages, specifically it refers to those peoples and countries in Latin America. For the most part, in anthropological studies originating in Mexico or Central America, the term "Middle America" is used to specify the particular geographical area and that is the term used here when necessary.

There is also a lack of consensus of how to approach the classification of ethnic groups in Middle America. In an article about the identification of Indian populations, Flores (1967) reviewed the changing definitions that have been proposed to characterize the populations of Middle America. He stated that "shortly after the Spanish Conquest, despite attempts to differentiate the two racial stocks of Spanish and Native American populations, a new type began to appear--the Mestizo--eventually predominating numerically" (p. 13). Mestizo is a term used by some authors to describe the product of the mixing of Spanish and Indian populations. In the literature specific to Guatemala, most authors use the term Ladino rather than Mestizo. It is also the term that is preferred by the non-Indian population of Guatemala, those persons descended from the early Spaniards and the native population. Flores (1967) classified the indigenous population by linguistic criterion since that is a criteria that can be quantified. For example, the Indian population of the west-central highlands are of the Quiche-Cakchiquel linguistic group, while Mam predominates in the extreme west. However, the use of this classification scheme becomes

difficult when one considers the rapid social change taking place in Guatemala and the remainder of Middle America. Due to change forces, Indians may cease to be Indians as such and move into a non-Indian group. Or, even more confusing, there are Indians who change from the use of their dialect to Spanish but still continue to identify themselves as Indian.

The Guatemalan Indian population prefer the Spanish terms Natural or Indigena when referring to themselves. Indio (Indian) its English equivalent, is considered a derogatory term. Most North American authors, when referring to the native populations of Middle America, use the term "Indian", and at the same time, they specify the particular geographical area and linguistic group to which they refer.

In the literature review terminology used by the particular author is mentioned. The review includes those references which deal specifically with Indian populations within the highlands of Guatemala. Since the highland area of Guatemala is adjacent to Chiapas, Mexico, selected literature from that area and the remainder of Middle and South America is included as it relates to the purpose of this research. The terms Ladino and Indian are used since they have gained wide acceptance in the literature on Guatemala.

Descriptions in the Literature

Middle America has long been a fertile area for anthropology and its various subdisciplines of archeology, linguistics and

cultural anthropology. It is the site of the vanished high civilizations of the Maya, Nahualtl, Zapotec, Aztec and other cultures. Present day Guatemala alone contains three distinct cultural groups, the Ladinos, the Indians and the Caribs, each of whom have their own cultural history and traditions. Linguistic studies (Flores, 1967) have shown that the Indian population contains eighteen different linguistic groups, each with differing cultural heritages and practices. The majority of studies in Guatemala have been done with the Indian population.

Most of the early anthropological work in Guatemala, from the late 1930's to the 1950's, was concerned with descriptive generalizations. Many attempted to shed some light on the ethnology of the vanished civilization of the Maya or other Pre-Columbian tribes by examining cultural traits, survivals and cultural parallels. From the beginning, however, there was a growing effort by some scholars to view Indians as members of present day living systems. It is generally acknowledged that Tax (1937) laid the foundation for understanding the modern people of Guatemala (Nash, 1967). Tax conclusively demonstrated that the social locus of Middle American culture in Guatemala was a municipio, a locally organized society with a particular variant of regional culture. Later research investigations developed a single problem or aimed for complete description of a community. Following the Guatemalan revolutionary period, other important approaches to studying cultures of Middle America utilized concepts of social change (Tax, 1952; Nash, 1958; Paul & Paul, 1955).

The most comprehensive work on Middle America is The Handbook of Middle American Indians (1967). The Handbook synthesized established knowledge, formulated generalizations and gave directions for further research. Finding commonalities in Middle American cultures as well as studying acculturation were the major contributions of Tax and associates (1952).

Nash (1967) stated that "to contemporary field workers in Middle America, the overriding problems of economic and political modernization of the nations seem to set the background against which all other studies must be placed"(p. 9). Adam's classic work on Guatemalan social structure, Crucifixion by Power (1970) identified the structural problems of underdevelopment and supports the assumption that new models of health care services must be viewed in terms of development policies in general and closely linked to all aspects of socioeconomic development.

Health beliefs and practices can best be understood within the context of the culture of the group. These beliefs and practices are influenced by the social institutions within the society such as the economic system, religion, social relations, family structure, education and language. Only a partial understanding of health behavior can be gained unless other aspects of a culture can be investigated and related to it. Certain aspects of Guatemalan Indian culture have particular salience for nurses and other health professionals, both in themselves as cultural categories, and in the ways they interact with health and illness systems. These broad areas of group life are reviewed prior to a discussion of health

and illness systems.

Family Relationships

In a review of the ethnologies of highland Guatemalan Indians prior to 1965, Nash (1967) stated "the family is the basic unit or organization; each family, whether nuclear or compound, has a separate structure" (p. 36). In his study of the factory town of Cantel (in the Department of Quetzaltenango), Nash (1958) emphasized the closeness of the family unit. In Cantel, Nash (1958) found that "the nuclear family is the unit of consumption, production, ritual performance, child rearing and religious activity. It is the family which has a social status in the community, and it is the family, rather than the individuals, which takes a turn at the discharge of social offices" (p. 52). Nash reported that "78.8 percent of the Cantel households were nuclear" (p. 53); others (Tax & Hinshaw, 1967) reported a mix of nuclear, joint or compound households in other Guatemalan communities.

Wagley (1967) reported that in Northwestern Guatemala, the patriarchal, patrilineal, patrilocal extended family dominates. Nash (1958) found that in Cantel, the residence of a newly married couple depends on the comparative wealth of the two families, with the family with the most wealth and space attracting the young couple until they have sufficient economic resources for a house of their own. There is some evidence to suggest that patrilocal residence seemed to prevail, at least in the early years of marriages, in most areas of Guatemala. Kinship ties extended to both sides and their

closeness depends somewhat on the proximity of residence (Tax & Hinshaw, 1967).

Marriage occurred commonly between the ages of 15 and 18 years, with the male usually a few years older than his partner. Choice of partner was confined to the same ethnic group and to the same village and decisions of whom to marry were left to the involved individuals. Children were viewed as a natural consequence of marriage and failure to have children was judged a grave misfortune (Paul & Paul, 1952). Wagley (1967) and Paul and Paul (1952) reported that many marriages were fairly unstable in the early part of the relationship and separation was common and imposed little stigma. Children were viewed as the stabilizing factor in marriage.

In all of the literature on family relationships, the pattern of male dominance and relative position was described. The male head of the family was dominant and the age and sex principles operated between siblings with the oldest and the male receiving the preference. Nash (1958) found that in Cantel, the man was the center of respect and dignity. His wife expressed her subordination in the customary way of serving him first at meal times, by eating on the floor while he ate at a small table, and by attending to his wants before her own. Often male children sat with their father while girls squatted on the floor with their mother. Nash found that men and women showed little outward affection toward each other. A good husband was one who provided the house and the food and did not beat his wife severely or without reason. A good woman was one who was a good manager in the domestic sphere and was attentive

and solicitous toward her husband and children.

Nash (1968) found that there was a strict division of labor according to sex between husband and wife. The man worked in the fields, cared for the animals and provided the food. The woman was responsible for the household tasks. Nash (1968) stated that "the labor is actually divided rather evenly, though the content of the male role is strikingly different" (p. 62).

Sex roles were clearly defined and children learned them early in life. At the age of four or five, children began to take up household tasks and by the time boys were about eight or nine years old they would accompany their fathers to the fields. Wagley (1967) found that "childhood is short and in adolescence, males and females take on adult roles" (p. 67).

Nash (1967), Wagley (1967), and Tax and Hinshaw (1967) reported that a family extended its personal relations with others in the community through the compadrazo system of ritual kinship. By taking on ritual or fictive kin at the life crises of baptism and marriage, a set of Padrinos and Comadres (Godfathers and Godmothers) was acquired toward whom respect and deference was shown and from whom counsel was expected.

Nash (1958) reported that in Cantel society, customary behavior did not permit social visiting, except on strictly defined occasions. In fact, he stated "idle visits to exchange pleasantries is culturally prohibited. There does not appear to be a pattern of friendship relationships in our sense of the word" (p. 74).

Both men and women used alcoholic excess as a means

of overcoming tensions in personal situations, such as fiestas or holiday celebrations. In such gatherings, drinking was licensed behavior. Throughout the literature, there was reference to gossip and envy as the primary means of social control. Nash (1967) stated "social life in general has the cast of impersonality, formality, and little spontaneous display of affection or emotion" (p. 37).

From the available literature, it would appear that regardless of its constitution, the household is the basis of socialization and learning. Most of the normal functions of life, individual and social, are confined to the family.

Language

In a review article on the Maya of the midwestern highlands of Guatemala, Tax and Hinshaw (1967) noted that the distribution of Indians speaking the Quiche languages does not appear to have altered since the 16th century conquest. Within the Quichean subgroup are five major dialects--Rabinal, Uspantec, Quiche, Cakchiquel and Tzutuhil.

There are a number of references in the literature (Beals, 1967; Sexton & Woods, 1977; Tax, 1952) that deal with acculturation, assimilation and other processes which influence change from Indian to Ladino status. The process is one way, from Indian to Ladino, and to be successful involves changing from a Mayan dialect to Spanish. No reference to a Guatemalan Indian population that is monolingual in Spanish only was located. This may be because linguistic criteria have been used to identify Indian populations, and

therefore, the more traditional groups, or Mayan speaking populatins, have been the ones investigated by anthropologists.

The literature that analyzed the cultural contacts between Indians and Ladinos (Adams, 1970; 1967), modernization and development (Sexton & Woods, 1977), acculturation (Beals, 1952; 1957) indicated that Indians in Guatemala have been second class citizens. De la Fuente (1967) stated that "from the Ladino point of view, the differences between Ladino and Indian show a natural inferiority on the part of the Indian" (p. 67). Considering the factors of discrimination, cultural change, increased mobility and educational opportunities, it appears evident that more Indians are becoming bilingual (Spanish in addition to one of the dialects), and for many of them, Spanish has become their primary language.

Economic Basis of Indian Life

Nash (1967) described the economic organization in the highlands of Guatemala as a solar marketing system with various commodities produced throughout a geographical region flowing to a major market center. Economic specialization of each community was a facet of the community's cultural distinctiveness. Indian buyers and sellers in the marketplace were members of households; skills in handicraft passed from father to son or mother to daughter. Skills and agricultural patterns changed over time and in response to market conditions as did the production of handicrafts. Nash found that "the Guatemalan Indian markets rest on the free interplay of buyers and sellers with prices established by the buyers

who are not large enough to set the price and sellers who do not control enough of the supply to effect the price" (p. 96). Nash suggested that this characteristic was a symptom of a prevailing fact of the economic organization of Indian communities. The Indian buyers and sellers were members of household units and were limited in the numbers and kinds of persons they could recruit, the capital and savings they could command, and the sort of economic activity to which they could respond. The social and cultural context of the economic operations, such as the low level of technology, limited land, bilateral inheritance and forced expenditure of time and resources in communal office and rituals served as leveling mechanisms to maintain a technological conservatism and an inability to seize and exploit or create economic opportunity.

Palerm (1967) reported that agriculture continued to be the principal economic activity and the primary means of subsistence for the Indian groups of Mesoamerica. The modifications and changes in Indian agriculture in this century have increased the socio-economic marginalization of Indian agricultural activities. Because Indian campesinos cannot compete with the highly technical farming practices and industrial manufacturing systems, Indian agriculture has ceased to be a major activity and whatever economic power they might have has been passed on to middlemen who stand between them and the national society. Palerm (1967) reported that Indian agriculture is not a separate economy of subsistence and prestige. Indeed, it is an integral part of a national market economy and, as such, is subject to price fluctuations, profit incentives, market

trends and competition from national and international sources.

Adams (1970) indicated that growth in the country's agriculture has occurred only in the export sector, bringing rapid profits to a very few landowners while systematically laying waste to huge tracts of land due to destruction of the soils. The increase in population and the scarce land resources have combined to produce a large number of both seasonal and full time migratory laborers. The full-time farm employee and the campesino were better off than the migratory laborer, whose numbers are now increasing yearly. Adams noted that all agricultural workers find themselves in a powerless situation. First of all, lack of income has prevented them from seeking legal redress and the continuing tradition of the patron-peonage system still discourages agricultural workers from seeking justice from the law. Adams stated that the social environment in which change might take place was restrictive; lack of leadership in the rural lower-economic sector, and restrictions placed on union organization which prohibit political action, effectively deterred agricultural workers from significantly improving their position.

Religion

Catholicism was imposed upon the native population after the Spanish conquest. Religious syncretism, or the incorporation of aspects of Catholicism into the Mayan religion was discussed by Madsen (1967) who distinguished acceptance by syncretism from acceptance by imitation. The Mayan value system focused on

agriculture and agricultural deities; it survived the Conquest virtually intact to become the backbone of resistance to radical religious change. This resistance was strengthened by the hatred of the Spaniards whose missionary efforts were hampered by lack of sufficient clergy able to communicate with the native population.

Cancian (1967) found that the characteristic politico-religious institution in Middle American Indian communities was the civil-religious hierarchy known as cofradías. The Indian religious organization, as it developed in most of Guatemala, has evolved around the special role of the cofradía organization and the place those organizations had in the social and political life of the community.

Nash (1958) described the cofradías as religious brotherhoods, each charged with the care of the local santo (saint) and the arranging of the fiestas (holidays). The cofradía consisted of ranked offices with more opportunities for participation at the bottom level than at the top. In a study of the cofradía system, Cancian (1967) stated that "as a male goes from boyhood to old age, he receives different kinds of responsibility in the hierarchy of his community and his family is nearly always involved in his service" (p. 285). Both Cancian (1967) and Camara (1952) noted that at the present time in Guatemala, this civil-religious hierarchy is giving way before the forces of ladinoization and other economic and demographic factors.

Most authors seemed to agree that the traditional civil-religious system fused the secular with the sacred. It has been

described as having several functions, including administrative ordering (Nash, 1958), economic redistribution (Wolf, 1959), social stratification (Cancian, 1965), age grading (Tax & Hinshaw, 1967), and economic devastation (O'Nell, 1972).

Sexton and Woods (1977) observed that there are two types of religious change occurring in Guatemala--from folk Catholicism (the cofradía system described above) to Protestantism or to reformed Catholicism or Acción Católica. They found that both of these movements were designed to be free of the undesirable elements of folk Catholicism, such as, "heavy drinking, smoking and paganistic practices." They suggested that reformed Catholicism was as much designed to counter the pull of Protestantism as it was to attract discontented folk Catholics.

Adams (1970) viewed the situation somewhat differently. He believed that Acción Católica was a response by non-Latin priests to resolve the local conflicts arising with the cofradías. In many areas of the country, civil religious organizations were very strong, and the priests were unable to make any significant inroads on the area of authority and power held by the Indian organizations.

Madsen (1967) found that little research had been done on the influence of Protestantism and Spiritism. Another movement, known as spiritualism, is a more recent activity in Middle America and the metaphysical distinctions between the rival cults of spiritism and spiritualism usually are not recognized. Leaders in each group are referred to as espiritualistas (spiritualists) and have been denounced by the Catholic church, although many believe that the

espiritualistas are Catholic.

Nash (1958) found that Protestantism appealed to the marginal man who was not at ease in his social and cultural environment in the Indian community of Cantel. The principle change accompanying the conversion from Catholicism to Protestantism was a reformation of personal behavior including the elimination of drinking, smoking and wife beating.

Sexton and Woods (1977) found that development (change at the community level) was only slightly, though significantly, correlated with a change to a new religion, and that a change in religious behavior was best predicted by personality and motivation variables in developed and underdeveloped towns alike.

Roberts (1968) found in a study of Protestant groups and coping in Guatemala City that the social organization of neighborhood Protestant groups encompassed moral and secular relationships that effectively provided for member's economic and social needs. He suggested that one of the effects of these groups under the conditions of life in Guatemala City was to withdraw members from overt political cooperation with people of similar social and economic position.

Cultural Change Processes

Adaptation to the socio-cultural evolution of societies is a process that occurs within all domains and at all levels of articulation. As interest has grown in the processes of change, development, and modernization among indigenous people, conflicting reports

regarding multiple phenomena have appeared. Since the interest of this author is in health related behaviors and those factors that influence health status, the discussion of cultural change has been limited to that most germane and useful to health care situations, keeping in mind how an understanding of sociocultural change can contribute to improvements in health and well being. Changing conditions in Guatemala can be understood in part as the result of ways in which individuals choose to combine time, effort and resources in the face of new situations. These factors underlie the emergence of new social relations and cultural understandings.

Beals (1967) discussed acculturation in Middle America from the time of the Conquest to the present day. The Contact and Consolation Period covers the time from the first contact of a culture with the Europeans to the consolidation of Spanish authority and policy. During this time, the Spanish established communication channels and administrative arrangements throughout Middle America. For many of the indigenous populations, the "conquest" was not a traumatic conflict of cultures, at least in the physical sense, nor did it take place at the same time for all of the groups who were involved. In many areas, it was merely a continuation of ancient power struggles that had been characterized by violent conflict and shifting alliances. The task of inducting the indigenous population into Spanish culture was primarily assigned to the Church. This massive attempt at culture change purposed to assimilate the Indian population into a new stratified society at all levels comparable to their position in the aboriginal stratified society.

The process was reciprocal and required modification of many institutions in the Spanish system.

During the First Colonial Period (1535-1720) rapid acculturation took place under varying degrees of direction from the different Missionary orders within the Spanish clergy. The receptivity of the native population to Spanish culture was clearly quite variable. In some areas, the Indian population declined drastically due to the introduction of new diseases or the impact of warfare or mining. Some groups resisted acculturation and numerous nativistic or revitalization movements sprang up. Nevertheless, most groups moved toward assimilation of newly forming mestizo patterns rather than the urban Spanish colonial patterns.

The Second Colonial Period (1720 to Independence from Spain) was a time of stabilizing interrelations between the two groups. It was characterized primarily by diminished cultural change and increasing alienation of the Indians. The withdrawal of the Missionary orders effectively left each Indian community free to innovate and consolidate in its own way. Beals (1967) reported that these isolating mechanisms undoubtedly accounted for the rich and infinite variety of contemporary Middle American Indian communities. In the First and Second Republican Indian Periods, individual Indian communities became even more on the defensive. The Republic abolished the colonial protective laws and Indian courts; equality of citizenship came to mean greater susceptibility to exploitation. Unable to resist by force, withdrawal and isolation on the part of the Indian provided the only defense.

The Modern Indian Period in Guatemala began in 1944 with the fall of the Ubico dictatorship. Government officials perceived the "Indian problem" to be one of introducing "modernism" and "progress", and official pressure was directed to changing the clothing, housing and the customs that were divergent from those accepted by the officialdom. To the Indian, these were symbols of his identity, essential to the social system by which he had kept his identity and security for the past three centuries. During this period, the Church's efforts to modernize, combined with various governmental reforms, contributed to the breakdown of the civil-religious hierarchy and its function in Indian communities. Beals (1967) stated that "in the traditional religious system lie the major mechanisms for the preservation of the Indian community as a social system. Forced introduction of a party system and destruction of traditional office holding patterns brought disastrous and rapid destruction to many Indian communities in Guatemala" (pp. 465-466).

Adams (1967) discussed the incorporation of the indigenous population and their community within the power structure of the state. Under the Conservative governments in the 19th century, the legislation dealing with Indians tended towards isolation and protection. They were recognized as a distinct class and special "protective" laws were formulated on their behalf. The result was a general caste system in which the Indians were kept separate from the ruling Whites and Mestizos. When the Liberals were in power, their policy was to encourage Indian contact with Ladinos; this resulted in loss

of communal lands, establishment of Ladino communities in Indian regions and modest educational programs for the Indians. Debt peonage was lifted in 1934 but immediately was replaced by a vagrancy law which served the same purpose--assuring a supply of cheap labor for large landowners. The introduction of the elective system combined with competitive political parties was a major factor in the breakdown of Indian communities. The National Indian Institute was established in 1945, but unlike its Mexican counterpart, has never been given a serious or substantial role to play. For a country with a low national income and few resources, the problem of nationalization of the Guatemalan Indian is a major one. Approximately one-half of the population is Indian--living in Indian communities in varying degrees of corporateness. Although the Indian population is declining relative to the Ladino population, both are growing at significant rates.

Ewald (1967) examined planned change directed by national and international agencies in Mexico and Guatemala after the Second World War. The condition identified as most critical has been the rural poverty caused by either the lack of land or its unequal distribution. Technology was crude and productivity was low. A closely related problem was poor health status.

> Poor standards of health and sanitation are reflected in high infant mortality rates, nutritional deficiencies, high prevalence of intestinal parasites and respiratory disease, all of these conditions being the result of inadequate diet and housing, general absence of medical care and unsafe water supply. Attempts at improvement are hampered by the physical isolation inevitable from lack of good roads and communication services, widespread Indian monolingualism and high illiteracy rates even

> among those who speak Spanish, and ignorance of rights and legal procedures, marketing, simple science and mechanics (Ewald, 1967, pp. 490-491).

Ewald found that in Guatemala emphasis has been placed on education, and, as conceived by the Guatemalan government, was synonymous with social integration. The many problems of literacy, public health, infant mortality, nutrition and housing all fell within the scope of rural education. The author emphasized that a flourishing national economy is a precondition to a successful program of social integration. In a country like Guatemala, whose general economic development is low, programs of directed change must be seen in terms of the broader national situation within which any agency must operate.

King (1967) studied urbanization and industrialization processes in which the Indian has been either the primary or incidental object of sociocultural forces drawing him into the nation and national culture. The urbanization of the Middle American Indian was analyzed on the basis of his actual residence in an urban settlement (a population of 2000 persons or more) and his adaptation of an urban way of life. The study indicated that many of the Indian populations in eastern and southern Guatemala are becoming Ladino but there is no evidence to suggest that they are becoming urbanized. However, in becoming rural Ladino, the first step to participation in national culture and urbanization was made; it does not imply that urbanization will occur, only that the opportunity is made available. The study suggested that before the Indian can be urbanized, he must acquire Spanish and it was an absolute

prerequisite to urban dwelling. Literacy in Spanish was a further step toward the acquisition of national culture. The Indian migrant tended to be associated with the processes of urbanization and ladinoization as Indian internal migrants move to "less" Indian (less monolingual) departments. Compared to Mexico, the Guatemalan Indian has had relatively little opportunity to engage in industrial work or to live in cities; cultural isolation existed among Guatemalan Indians.

> Even in Quetzaltenango, the second largest city in Guatemala, with a long history of urban Indians, the caste line between Ladino and Indian has touched off internal stratification among the urban Indians themselves. This social separatism has not prevented the Quetzaltecan Indians from engaging in industrial pursuits nor has it precluded their participation in modern culture although the latter is more the prerogative of high-status Indians. (King, 1967, p. 535).

The investigator suggested that the introduction of the pattern of modern industrial urbanism will undoubtedly destroy present Middle American Indian culture. King predicted that it will occur more rapidly in Mexico; in Guatemala, the change will probably cause the growth of a large rural proletariat which has no cultural identity as an Indian. The culturally identifiable Indian will be assimilated economically and culturally rather rapidly in Mexico. In Guatemala, this assimilation process will traverse a slower and perhaps different route.

Ethnic Identity and Ethnic Change

De la Fuente (1967) examined ethnic relationships in Middle America. He concurred with Redfield's definition of an ethnic group

as one whose members' sense of identity stems from the same characteristics of race, genealogy and culture. De la Fuente found that denoting Indians or Ladinos in Middle America as ethnic groups was a convenient abstraction because of the great differences within each group; the boundaries were primarily based on cultural rather than racial grounds. The Indians, as a group, tended to be relatively homogeneous physically, despite diversity shown by Amerindians and indubitable signs of mixture with Negros or Caucasoids. Ladinos were physically more heterogenous, ranging from pure Caucasoids to pure Amerindians. Language, literacy, surname, type of housing, place of residence and various customs were the traits commonly considered when distinguishing Indians from Ladinos.

De la Fuente noted that in language, it was the Indian who was regarded as speaking an indigenous tongue, even when Spanish was a second language. Indian illiteracy derived from their monolingualism, because even though the indigenous languages have been provided with an alphabet, it was little used in formal education. In some areas of Middle America, an indigenous surname was still used, but the tendency was toward a change to Spanish surnames. There were some areas where both men and women wore the traditional dress; in others only the women did. In east and southeast Guatemala, men and women dressed like the rural Ladino. In general, in areas where indigenous organization was strong and cultural change came slowly because change was resisted or obstructed by local leaders, both men and women wore traditional clothes and lived in traditional houses. The tendency in Guatemala, with some notable exceptions,

was for Ladinos to be urban or semiurban and for Indians to be rural. De la Fuente found that the strong religiousness of the Indians, the incorporation in their religion of non-Catholic concepts and practices, their forms of politico-religious organization marked them from Ladinos. A number of authors, Cancian (1967), Camara (1952) and Paul and Paul (1963) have recorded that the strength of the traditional cofradía was disintegrating. Adams (1967) found that the Indian religious and political hierarchy was crucial to the maintenance of the traditional Indian community. With changes in the socio-political structure, the Indian's resistance to cultural change began to disintegrate.

In an earlier article, De la Fuente (1952) suggested that occupational differences have reflected Indian-Ladino differences. The majority of Indians were agriculturalists, other occupations being secondary. They worked the land themselves and tended to be common laborers, servants and curers. Some, like the Ladino, were storekeepers, teachers and restaurant keepers. Generally, the Indians as a group were poorer than Ladinos. In some regions, the social structure of the two groups approximated a caste system, and in other regions it could have been considered a class system. It was the Indian who occupied the bottom position of either grouping. Social mobility took the form of vertical trans-ethnic "passing" or acquiring the status of a different group. Differences existed in each community as to the relative ease of "passing". In some places, there was complete absence of "passing"--no Indian or "part-Indian" was ever considered Ladino. More complete or total "passing" also

existed in some areas.

Considering the complex state of ethnic relationships in Middle America and the rapid cultural changes occurring, a reasonable definition of "Indianness" that most scholars would seem to accept is that of Paul (1952) who stated "an Indian is a person who considers himself, and is considered by others, an Indian." (p. 95).

Beals (1967) found that in Mexico, the national policy was that of "incorporating" the Indian into Mexican society. Such planned change, however, developed contradictory ideologies. Beals stated that:

> . . .at one extreme were essentially romantic ideas of restoring the Indian past, a past essentially unreconstructible in all its details. Others directed efforts toward economic rehabilitation and the restoration of Indian dignity and autonomy. Still others thought complete assimilation through education and direct intervention was possible in the Indian community (p. 465).

Disillusionment with planned change soon occurred. Along with stiff resistance to some programs, the Indians were changing in ways not anticipated by Mexican officialdom. In particular, they were clinging to their "Indianness".

Cancian (1967) discussed aspects of cultural change in terms of Ladinoization, direct political action and economic and demographic factors. Expanding road systems have brought rural populations closer to the national cultures of both Mexico and Guatemala. Communications within the country and to the outside have improved rapidly. Laws protecting the Indians from the exploitation that was widespread in the past have been enacted. Religious and civil responsibilities have been separated, and direct political action

by national governments have undermined the traditional civil-religious hierarchies in the Indian communities. In general, alternatives to the traditional life in the Indian community have increased.

Gillin (1952) differentiated between Indians and Ladinos in terms of ethos and cultural aspects of personality. He found that the fundamental goal of Indian cultures was to effect a peaceful adjustment of man to the universe and to the Indian, the individual counted less than the group. The universe for the Indian was spatially limited and its horizon did not extend beyond the local region. That the Indian identified with the land and physical toil was one of the accepted facts of life. The Indian was adjustive and permissive; age brought knowledge, wisdom and respect. Adjustment without friction was the goal, withdrawal rather than domination was prescribed behavior in the Indian culture.

Articulation with the Ladino Population

Examination of the historical antecedents is necessary prior to understanding the role of both Indians and Ladinos in the present circumstances. Flores (1967) stated that legally sanctioned racial discrimination by biological criteria was a powerful instrument of the colonial government and enormously facilitated exploitation and enslavement of the Indian for a three hundred year period.

Adams (1970) in his study of Guatemalan social structure, discussed debt peonage and vagrancy control. Both were methods used

to assure that workers (nearly always Indian labor) fulfilled their work obligations. Local authorities had the power to arrest laborers accused of failing in their work obligations and return them to the patrones, or their agents. The patron could request that the laborer be returned to the work situation or sent to the Company of Zapadores to work off the debt. The Company of Zapadores consisted of a special set of army battalions specifically composed of Indians from designated municipios. They were to serve the usual two years of military service, but in "time of peace", they were to be under the ministry responsible for road work, and they were to construct the country's highway system. Each municipalidad was responsible for providing ten Indians twice each year. These restrictive provisions were supported by a vagrancy law which provided for imprisoning individuals who were denounced as vagrants. Although these laws have been abolished, the structural variables within the society that produced them remained the same. Ladino exploitation in more subtle but powerful forms continued through a concentration of wealth, industrial organization and political power that tended to reinforce traditional power differentials within the society. While there has been impressive growth in Guatemala, benefits have increasingly been channeled into the upper economic section and there has been no increase in the distribution of economic benefits to the lower sector.

While Adams researched Guatemalan power structures and broadly analyzed the power domains within the national and international setting, other investigators have confined analyses to the

commonalities and range of Middle American culture and society. This was done against a background of degrees of acculturation or assessing where in the culture area what aspects of "Indian" culture was most retained or most eroded (Nash, 1967).

Beals (1952) reviewed the acculturation processes of Middle America during the Colonial Periods. Spanish society changed from a class to caste society; intermarriage with Indians was prohibited. The Indian was definitely and officially relegated to a position of inferiority.

De la Fuente (1967) studied ethnic relationships between Ladinos and Indians in Middle America. The degree to which people identified themselves according to race and culture varies widely. In some areas, from the Ladinos' point of view, the differences between Ladino and Indian showed a natural inferiority on the part of the Indian. Ladinos ascribed to Indians inferior traits and scorned many of their customs and beliefs as backward, infantile or gross, befitting primitive or rude people. With certain exceptions, Indians accepted their ascribed inferiority, but with varied repercussions. In some areas of Guatemala, Indians were likely to view cultural differences as natural and not to adopt Ladino patterns. Indequality of status between the two groups was manifested in the ethnic terminology, in social expressions, and rules of conduct by which the Ladino received deference from the Indian but did not return it. Differences in language, tradition, interests and social positions distinguished the two groups in most activities where each group participated more or less alone, or were peculiar

to only one group, or both groups participated but the Indians remained on the periphery. Division of labor along ethnic lines tended to be complementary rather than competitive. Indians, as a group, occupied the lower part of the economic scale; Ladinos, as a group, occupied the entire scale. Labor legislation, although designed for both groups, did not protect Indians sufficiently. De la Fuente reported that for the Indians, the government existed only for exacting obedience to orders, inflicting gratuitous services and unpaid labor and extorting fines and fees. Requirements in construction, repair of roads and military service weighed heavier on the Indians than on the Ladinos. Indian education was less effective than that of the Ladinos because of ignorance of Spanish, the Indian's practical orientation, poverty, the academic emphasis of the curricula, the role assigned to women, and other causes. Teachers were chiefly Ladinos. Formal education of the Indian was recognized as an important means to national integration, however, "education" signified the transmission to the Indian and his adoption of Ladino culture and values. Ritual kinship crossed ethnic lines, but was related to the differences in the ethnic status of the groups. For example, an Indian could initiate the godfather role and the Indian, as beneficiary of a ritual service, could be doubly indebted and respectful of the Ladino.

In earlier research of ethnic relationships, De la Fuente (1952) reported that it was invariably the Indian who solicited the ritual kin relationship. Preference for a Ladino was related to particular qualities ascribed Ladinos, the protection which a

Ladino may provide, or because the Ladino was able to pay for the ceremony. The Ladino generally complied with his duties as godfather, although he did not take the relationship as seriously as he would have done if the relationship involved another Ladino.

Marginal populations in Latin America

The early literature on marginality in Latin America dealt with a number of closely related phenomena such as urban poverty, rural-urban migration and shantytowns. The squatter settlements that had appeared around the edges of Latin American cities during the late 1940's were marginal in a geographical and ecological sense since they were located outside the urban limits and beyond the reaches of urban facilities.

Adams (1974) has provided a broad conceptual framework for marginality. Adams found that the organization of society into increasingly complex social structures was achieved at the considerable cost of marginalization of certain sectors or strata of society. "Structuring" was the process by which society, in an attempt to control its environment, placed even greater sectors and elements of this environment beyond its control. An increment in order at the center of society necessarily entailed an increment in disorder at its periphery. Marginalization was seen as the result of the concentration of wealth, industrial organization and political power within a country. Technological expansion in the great industrial power centers of the world created an increasing

marginalization along the periphery of these power centers; for example, in Latin America, underdevelopment was seen as a direct result of industrialization in other countries, particularly the United States. Adams suggested that in the advanced capitalist economies, marginalization was counteracted through welfare programs as it is in the socialist economies through full-employment policies. In the so-called "underdeveloped" countries, no strategy concerning the control of marginality has yet emerged.

Lomnitz (1977) found that marginality was the result of stratification taking place within the Latin American working class as a consequence of industrialization. Massive underemployment was generated among the traditional population, which remained unskilled from a modern industrial point of view.

This type of marginalization was more acute when capital-intensive technologies were introduced because there is already a glutted labor market resulting from the population explosion. Marginals occupied the bottom of the social scale in society. Their occupations had one thing in common: they lacked any reasonable security features, such as job security, social security, or a reasonable safe level of monthly income.

In a study of the social and economic structure of a Mexico City shantytown, Lomnitz (1977) found that migration patterns, residential patterns, and occupation patterns indicated the importance of reciprocal social networks as an underlying mechanism for economic survival. These networks, formed between kin and neighbors, provided a level of economic security on a day-to-day basis.

Spatial and social proximity and equality of wants were important factors in the formation and dissolution of these networks in conjunction with confianza (trust) which measured the relative readiness to engage in reciprocal exchange. Lomnitz suggested that this type of social structure has evolved in marginal populations to mobilize the social resources of individuals and households on behalf of survival. She stated that "it is necessary to understand the general causes of marginality in the Latin American setting, since the problem of individual survival is closely related to the structural insecurity of the marginal strata resulting from their peculiar relationship to the urban industrial economy system" (p. 3).

It is interesting to note that in one of the few investigations done in Guatemalan shantytowns, Roberts (1973) arrived at somewhat different conclusions than Lomnitz. He examined how poor people cope with an unstable and mobile urban environment in two poor neighborhoods of Guatemala City, Guatemala City's rapid growth and low level of industrialization have created a keen competition for jobs and available living space and have inhibited the development of cohesive residential groups. The poor of Guatemala City found themselves living and working with strangers. Roberts found that "these people have neither the intensive interactions that generate trust nor are there present the identifiable credentials that allow people to readily form and use relationships with strangers" (p. 191). Most families maintained relations with dispersed sets of kin, friends and possible patrons. While an adequate

means of coping with their environment, these associates were not easily combined to consistently organize it. While Roberts noted that reciprocity relationships were present, he stated "trust is an emergent property of such continuing exchanges and promotes stable social relationships. But the social context is also crucial to the development of trust" (p. 171). The uncertainties in the social context and in the relationships among poor people and between them and other social groups created instability in this Shantytown population.

Differences in the results of the two studies may have reflected differences in the level of industrialization and the structure of the political and social customs of each country. Differences in the populations may also account for some of the conclusions. For example, Roberts described the Guatemalan population as "highly mobile", whereas Lomnitz reported that new residents to the Mexican Shantytown chose that particular area because they had relatives or friends living there. Roberts found that migrants to Guatemala City often arrived without the safeguard of adequate contacts due to the political instability of the country and the fact that in a small centralized country, many provincial jobs ultimately lead to the capital. Discontinuity and instability was likely to be increased by having to find their own way in a new environment.

Traditional Health Care Systems

Social science research of health care in Latin America has been the subject of four comprehensive review articles in the

literature of the 1960's (Badgley & Schulte, 1966; Sepulveda, 1966; Rubel, 1966; 1968). Each article emphasized that the social and cultural background affected health problems and practices. It was suggested that as social and economic development occurred, it would be reflected in changing patterns of health behavior. These studies also suggested that health care delivery was an important aspect of national development and planning, and that health planning should take place along with other social and economic development.

The study of traditional health care systems within the context of social change has been viewed by anthropologists as a crucial area for investigation. Such research has identified how cultural factors influenced the acceptance or rejection of modern medical care. The people's strong faith in folk health care systems has sometimes been viewed as a major barrier to the utilization of modern medical facilities. Other investigators have attempted to demonstrate how consideration of local beliefs and practices enhanced the establishment and acceptance of Western medical practices.

For example, Erasmus (1952) examined changing folk beliefs in Ecuador and observed that one of the most fascinating acculturation problems in Latin America is that resulting from the contact between folk and modern medicine. He stated "it is possible to study not only the conflict between two systems of knowledge, but also the differences between those two polarities we call magic and science" (p. 411). Erasmus argued that folk medical beliefs and

knowledge were based on inductive logic and frequency interpretations or correlations made between repetitive phenomena. This enabled predictions of situations in which illnesses could be contracted or avoided. He stated "as long as the law of averages works in favor of the curer, his results are empirical demonstration that his methods, as well as his theories and explanations on which they are based, are, in general, valid though not infallible" (p. 424). Cure was often the proof of a correct diagnosis of the cause as well as the efficacy of the treatment.

Rubel (1960) discussed concepts of disease in Mexican-Americans living in Texas. He found that common folk-illnesses were firmly embedded in the socio-cultural framework, despite the introduction of an alternative system of belief and competitive healing ways. Three particular folk illness, empacho, mal ojo, and susto, functioned to sustain some of the dominant values of the Mexican-American culture. These dominant values maintained the solidarity of the small, bilateral family unit, and prescribed the appropriate role behavior of males and females, and of older and younger individuals. In this process, the folk illnesses have become highly symbolic of a traditional way of life and have attained a significance which goes far byond their importance as pathological conditions.

Simmons (1955) in a study of folk medical beliefs in Chile and Peru suggested that attempts to introduce modern curing practices will have a higher probability of success than attempts to modify the basic causal concepts of folk health care systems. The author

concluded that the people consider their own theory of disease more useful and adequate than the one advanced by modern medicine, but at the same time, they have been willing to accept modern remedies as still another means of curing illness once they have demonstrated their pragmatic value.

Madsen's (1955) work with the hot-cold concept in the folk beliefs of the Nahuatl Indians suggested the Hippocratic system introduced by the Spaniards was intimately comparable with the ancient Aztecan concept of balanced opposites. Not only was it compatible with their old beliefs, but it was also accepted because the Indians believed in the system's general effectiveness in curing illness. The hot-cold complex expanded continuously in the Indian culture until it pervaded not only the field of curing, but other aspects of life as well. Even today, the Indians are eclectics in regard to borrowing new theories and practices from modern medicine. They have accepted some modern medical practices as effective, but have not revised their fundamental theories on the causes and curing of diseases and the hot-cold complex often conditions acceptance or rejection of new medical procedures.

Other researchers have challenged the assumption that traditional health beliefs (i.e., beliefs in supernatural causation, in the efficacy of folk curers, etc.) were major barriers to utilization of modern health care facilities. A number of investigators have suggested that factors related to the delivery system are more crucial than those associated with the individual patients themselves.

Foster (1952), in a coordinated study of public health centers in four Latin American countries, found that impersonal care, long waiting periods, and the lack of medical attention for ill children were important barriers within the delivery system. Foster stated that "the anger of parents whose sick children have been refused treatment has given rise by many people to strong antagonism towards each and every one of the activities of the centers" (pp. 289-290).

Simmons (1955) and Press (1969) discussed the dual use of traditional and modern health care systems in urban settings in Chile and Columbia respectively. They concluded that once modern medicine has demonstrated its pragmatic value and curing efficacy, modern health care systems were readily utilized.

Solien-Gonzales (1966) discussed the health behavior of the three major cultural groups in Guatemala--Ladino, Indian and the Black Carib. The manner in which these cultures utilized medical services paralleled descriptions in the literature for persons of non-Western cultures elsewhere, and even for members of the lower classes in England and the United States. Failure to utilize modern treatment facilities did not indicate retention of traditional beliefs as much as dislike of an inaccessible, impersonal and deprecating medical care system. Solien-Gonzales suggested that personal respect and individual consideration are major values held by most Latin Americans, and if these were disregarded by health personnel from different cultural traditions and of higher socio-economic status, people were offended and did not return to health institutions.

Teller (1973) in a study of access to medical care by Honduran migrants found that his sample had low access rates to professional medical care. No consistent relationships were found between migratory status and access to medical care once socio-economic status was held constant. Whether or not a person, or family, manifested modern medical care utilization depended more on the urban opportunity structure than on attributed traditional cultural beliefs and attitudes.

Higgins (1979) argued that there has been a lack of socio-historical depth in the descriptions of traditional health care systems in Mexico. These systems of health care should be understood in terms of the pervading material condition, which has been extreme poverty. Poverty and its many ramifications have had adverse effects on overall health status and there has been limited efforts to introduce modern medical services in rural Mexico. Thus, the rural poor of Mexico have found themselves in a situation of adverse health conditions with corresponding non-involved technological health care systems at the national level. As a result, they have created their own health care systems. Urban poor, because of financial limitations were unable to attain access to health care facilities. They too, created and maintained their own health care systems. The author suggested that the construction, delivery and maintenance of adequate health systems for different groups of people should become a socio-political issue; as only changes in overall material conditions will cause people to alter or abandon their folk systems.

The most extensive analysis of organized medical care in Latin America has been done by Roemer (1964; 1968). He has consistently stressed the serious inequalities inherent in a system historically founded along social class lines. In most Latin American countries, he found some nine or ten major systems of organized health services--more or less independent of one another and operating to serve the needs of different socio-economic sectors of the population. Roemer (1964) outlined the different systems of health care as follows:

> Indigenous healing is of greatest importance for Indians and Mestizo peoples in the hinterlands . . .Social security systems and special government programs have rigidly defined benefits for certain populations or goups. Charity services and generalized government programs serve the great bulk of the rural peasantry and the urban poor. Industrial medical programs provide services to workers and families. Voluntary health insurance is concentrated largely in the small upper-middle class. The private sector serves mainly the well-to-do, but will serve patients from any class who are able to pay the private fee-for-service. Voluntary agencies, supporting special services, i.e., for polio victims, emergency services (the Red Cross) all serve special populations and are often subsidized by the government. Pharmacies sell prescribed and non-prescribed drugs to anyone who is able to pay the price (pp. 204-206).

Illness and Curing in Middle American Indian Cultures

Two major review articles (Wisdom, 1952; Adams & Rubel, 1967) on illness and curing have been drawn from the ethnology and social anthropology of Middle American Indian cultures. They are reviewed in some depth here as they cover the general features of illness, diagnosis, curing and supernaturalism in Middle America.

Wisdom (1952) in a review of the supernatural world and curing said that present day Middle American supernaturalism was an end product of the combination of Spanish Roman Catholicism and the indigenous religion and magic of the ancient Maya and Mexicans. Both have persisted in varying degrees in different localities. What generally happened was a complete fusion of early Catholic and native ideologies that resulted in a new and distinct supernatural system, neither Maya, Mexican, or Catholic, and necessitating the study of the system as a functioning, integrated whole among each group. The supernaturals were loosely classified by Wisdom into six categories. a) God and Christ: often no clear distinction was made between them and although God (or Christ) was viewed as being all-powerful, he was a distant figure with little direct influence on man's affairs. In some areas of Guatemala, God or Christ was just one of the saints. La Virgen was seen as a sort of "superior saint." b) The native deities who were associated with agriculture, the sky and the earth. They were subservient to God and were associated with the snake form. They were believed to be responsible for the rainfall, the sun, good crops, etc. In some areas, certain supernaturals were associated with the growth of the milpa (the corn plant), and were acknowledged as life sustaining patrons of growth, good crops and abundant harvests. c) Native patron supernaturals who served as guardians and protectors of specific localities and plant and animal life. d) Spirits of the dead and half-spirit animal protectors who were known as naguals. Spirits of the dead could be malevolent and the concern was both to honor

them and express respect, yet mollify them in the process. On the annual Day of the Dead, they were given food to eat and their graves decorated. The nagual, half-animal and half-spirit, attached himself to an individual at birth and served as a protector throughout life. Wisdom reported nagualism was confused with the animal transformation of sorcerers and witches and was relatively unimportant. d) The apparitions who were without exception malevolent. They were night-walking and encountered by single individuals in lonely places. They were responsible for evil and black magic and were often associated with sickness, insanity and other misfortunes. e) The patron saints (los patrones, los santos), were the most highly regarded of all the supernaturals, and have steadily gained in competition with the native dieties. Wisdom found that "saint worship is general throughout the area and seems to be the most important aspect of religion. Middle America might be classified as 'saint worshippers.' God (or Christ) and the Virgen are viewed as superior saints" (p. 123).

Wisdom stated that "sickness is generally said to be caused by: a) frights (espantos); b) evil air or wind; c) contamination by the ritually unclean; and, d) magical seizure by sorcery" (p. 129). Two complexes of ideas related to body conditions. The first involved susceptibility of illness and was classed as a "weak-strong" dichotomy. The weak (delicado) were more susceptible to illnesses, while the strong (fuerte) were comparably safe. Weakness could be caused by over-exertion, body exposure, any sickness or specific conditions, such as pregnancy, childbirth,

menstruation or menopause. It could be brought about by emotional states such as anger, fear, jealousy and hysteria. The young and the very old were viewed as being in a weak state. Certain traits, such as placidity, were viewed in the same manner. The opposite of these qualities lead to strength and immunity to illness and disease.

The second complex of ideas involved the notions of "hot" and "cold." Body conditions, as well as plants, foods and medicines were described as hot or cold. A hot condition was treated with a cold remedy and vice versa. Wisdom found that "Good health depended, to a great extent upon maintaining proper equilibrium between hot and cold" (p. 130). Frights were caused by fear, hysteria or other extreme emotional upsets. They contributed to weaknesses which causes one to become more susceptible to illness. Evil wind was related to air or winds in general that entered the body and caused pain or illness. Belief in ritual contamination as a cause of illness was common, the most important and prevalent belief was in mal ojo, (the evil eye). Persons with bright, staring eyes or with strong feelings, such as envy or jealousy, could cause harm or illness merely by looking at someone. Those in a weakened condition, such as the very young, were particularly susceptible. A woman who was menstruating or pregnant was thought of as contaminated. Abnormal bodily changes or conditions, such as insanity, mental retardation or strong anger, could also cause contamination. In addition, sickness could be caused by sorcery.

Wisdom found that curing was done by diviners, curers

(curanderos), herbalists, massagers, midwives and "surgeons." Diviners and curers (in some cases the same individual) received their powers and abilities from a patron deity and made use of both ceremony and magic. Herbalists usually administered various remedies, but could use magic and power also. Massaging, surgery (usually treating wounds and staunching bleeding) and bone setting could be performed by the same individual. Curers used various techniques and remedies for cure. "Passing" live animals over the sick person or making a "pulling" motion over him to "pull" or take away the sickness was reported. The use of objects having ritual potency (eggs, crosses, candles, plants, etc.) were commonly used in the cure. Remedies were mainly plants and were administered internally or made into teas, lotions and poultices.

Adams and Rubel (1967) reviewed the principal features of illness, diagnosis and curing in Middle America and related them specifically to the context of social relationships in which they were found. They reported that "the concept of illness is meagerly described in the ethnographic literature--it is applied to any condition which makes a person feel bad; the distinction between illnesses of organic and psychological origin is not basic to the Middle American viewpoint" (p. 334). Susceptibility to illness was determined by the individual's emotional status and his ritual and social conduct. A major concern was with the concepts of strength-weakness and hot-cold, as well as strong emotional experiences. The notion of balance or the maintenance of some equilibrium between the two extremes was common. Ascribed causes of illness were

seen as set by two areas of knowledge.

> The first concerns knowledge of the patient, his physical symptoms or general syndrome, and his behavior and social relationships. These things may be known beforehand or learned during the diagnosis. The second involves a set of concepts from among which an explanation is formulated as to why the patient finds himself in this condition (Adams & Rubel, 1967, p. 336).

In the first area were the anthropomorphic and other volitional beings and included the ascription of animate or volitional qualities to aspects of the environment and to other persons. Animation of the environment was found to be common in Mesoamerica. Gods and saints were seen as responsible for sickness and God was said to punish people for a variety of errors and sin. Adams and Rubel reported that, "Sprites and spirits have various ascribed roles from downright malevolence to mischievousness" (p. 338). They attacked those persons in a weakened condition or sometimes specifically for punishment. These spirits were reported to be dwarfsize and often had light hair and skin and were associated with Spanish-American or Ladino appearance. It was reported that "they behave towards the Indians as Ladinos behave, that is, as masters, employers or bosses" (p. 338). Ghosts played a minor role in illness although it was reported in some areas that the ghosts of persons who died by violence were said to remain and tried to harm or kill others in order to liberate themselves. Aires (airs) were identified as a kind of air or wind that entered the body and caused illness or other aches and pains. Belief in witchcraft and sorcery (the ascription of special animate powers to individuals) was constantly encountered in Middle America, but its' practice

varied. Witchcraft was attributed to someone outside of the family and usually the victim was regarded as having been in a weakened state and therefore susceptible.

The second area of ascribed causes of illness was the environmental and nonvolitional factors such as hot-cold, strength-weakness and emotional upsets. The hot-cold term referred to qualities of objects or persons, and their application was associated with sickness. The classification was rationalized on different bases in the various areas of Mesoamerica. Strength-weakness concepts were common; weakness was believed to be inevitable in infants and children; this rendered them especially susceptible to "el ojo."[1] Anyone, but especially a stranger, who was by nature strong (or who was temporarily strong, or hot) could cause el ojo by touching, fondling, or even being close to a child. Adams and Rubel stated:

> The importance of this common belief is that ojo is apparently a pan-American illness usually derived from a stranger. It thus places the mother in the position of protecting her child against the world of outside strangers (1967, p. 345).

Strong emotional experiences gave some people the qualities of strength or weakness, so that they could cause an illness in another person or become ill themselves. Anger, frustration, jealousy and fright were conditions believed to be significant.

---

[1]To avoid confusion, the term for 'evil eye', variously mal ojo and mal de ojo in different parts of the area, is here rendered simply as el ojo. The difficulty in using either of the other terms is that where one is used, the other usually refers to some kind of eye condition or infection. El ojo nowhere has this meaning.

Cólera, bilis, envidia, and muina were common terms for these conditions; susto and espanto referred to fright. Belton and Pozas (in Adams & Rubel, 1967) found that "there is probably no traditional sickness more widespread in the country (Mexico) than that designated bilis, that condition that originates in a person who experiences sensations of anger, passion, or fright" (p. 346). Situations producing fright that could result in soul-loss sickness were soul-wandering, the jarring loose of the soul by a sudden experience, capture of the soul by a spirit or sudden emotional experiences. Soul loss was usually associated with the comission of social or ritual error.

The initial diagnosis of any illness was usually made by the individual who applied a home remedy. If the illness continued, the individual and his family became more concerned and sought a curer. Adams and Rubel found that "the kind of curer called for or visited varied with the degree of Spanish-American culture in the community" (p. 347). The first thing attempted by the indigenous curer was to determine the nature of the illness; in conjunction with the diagnosis was a pronouncement of whether or not the individual would survive. It was necessary to determine what made the individual susceptible to illness and what it was that took advantage of his susceptibility. Adams and Rubel referred to this as the "inner" and "outer" conditions. Inner conditions were such things as being too hot or too cold, under emotional stress or at fault in a social or ritual observance. The outer conditions involved spirits, God, witches, aires, too much sun, or too much cold.

The authors reported that "the kind of cause chosen and consequently the kind of cure assigned is completely dependent on the conceptual categories of illness causation current in the community" (p. 348).

Divination was found to be similar over Middle America but varied somewhat by community. It included such things as feeling the pulse or rubbing an egg over various points of the patient's body and then inspecting the egg for clues. An important aspect of the diagnosis was the questioning of the patient and his family about recent behavior and experiences to determine if some social ritual or norm had been violated. Two types of practitioners were described for curing. The first type was the limited practitioner who confined himself or herself to particular situations; examples were midwives, herbalists, bonesetters, medical doctors, pharmacists, etc. The second type of practitioner was the socio-ritual curer who was concerned with the ritual and social correctness of his patient's recent behavior. They viewed the patient as a victim of his own misbehavior and their job was to keep him an effectively behaving member of the group. This type of curer was able to mediate between individuals and the spirit world to effectively bring about cure. Witchcraft was viewed by the authors as "intra-group" and "extra-group." Where the accusation of witchcraft occurred within the group, curing required the participation of the offending witch and strict adherence to social ritual. This was seen by Adams and Rubel as increasing social solidarity and integration. If "extra-group" witchcraft occurred, the "outside" witch would not

come forward and participate in the cure; counter-witchcraft must be practiced. This was destructive of group solidarity. The authors suggested that these social forms of illness and curing were constantly incorporating new elements and served in helping the individual adjust to the tensions of living in a multicultural and changing environment. They provided ready-made devices for directing aggression to scapegoat groups and individuals, and at the same time, they reaffirmed the importance of the local group to the individual. Fright, ojo and witchcraft were all easily adjustable to the modern situation.

Recent Research of Health and Illness

The early studies of illness and curing among Guatemalan Indians were done as integral parts of ethnological or ethnographic community studies. More recent research has focused on certain aspects of traditional health care systems or on particular health behavior. Particularly, in the last decade, the findings have been subjected to various statistical interpretations.

For example, Woods (1968) studied the process of medical change in Guatemala with particular attention to innovation in the area of medical practice and belief. The investigation was conducted in San Lucas Toliman with 40 Indian and 15 Ladino households. The analysis indicated that while Ladinoization is occurring, the loss of Indian traits has far outpaced the acquisition of Ladino traits or acculturation. The author reported that this situation has led

to feelings of insecurity, demoralization and loss of traditional institutions within the Indian population. Indian medical behavior reflected these social conditions. While the Ladinos readily used modern medicine, the Indian population met the challenge of illness with a series of non-patterned and seemingly unrelated behaviors as they sought different resources for cure. Modern medicine was employed as a supplement rather than a replacement for folk medicine. Barriers to the acceptance of modern medicine were positively correlated to a determined belief in the efficacy of supernatural aid for the ill, the persistance of etiological categories not amenable to treatment by modern practitioners, differential perception of the curer's role and motivation. Nevertheless, Woods found that modern medicine has registered substantial gains. This was attributed to the sociocultural disorganization, the felt need for improved medical care, and the pragmatic effectiveness of modern medicine.

In a later study, Woods and Graves (1973) described the health care system in San Lucas Toliman as "traditional" and "modern." They described private physicians, public health physicians, nurses and physicians employed by charitable institutions, all of whom were subsumed under the category of modern medicine. Traditional Indian folk practitioners were identified as shamans, midwives and a number of different types of lay curers. Proponents of folk Ladino medicine were pharmacists, spiritualists and curers. Professional medical practitioners and folk practitioners were used concurrently by both Indians and Ladinos. The authors found that

despite this evidence of syncretism, the extent to which modern medical practices were replacing traditional practices was impressive. They stated:

> The traditional epistemology in Guatemala. . .has at its core beliefs about the causes of health and illness which support and serve as the rationale for traditional medical practices. The introduction of modern medicine, which is based on quite different beliefs about disease causation, is apparently undermining these traditional beliefs even in spheres which are not obviously health-related. The fact that modern medical services have not been available in most Guatemalan villages until fairly recently may help account in part for the "conservatism" in traditional Guatemalan world-view which has been widely commented on by anthropologists. Since there appears to be relatively little resistance to the use of modern medicine by Guatemalan Indians, however, one can predict that further changes in beliefs may follow now more quickly (pp. 53-54).

Logan (1973) examined the concepts of humoral medicine in the folk beliefs of Indian and Ladino peasants of highland Guatemala. He noted that the expansion of the Spanish empire brought the concepts of humoral science to the New World and through the process of acculturation, certain beliefs were incorporated into Mestizo and Indian views of health. In humoral medicine, four primary qualities, hot, cold, wet and dry meet in binary opposition to constitute the "essence" of all matter. They do not refer to actual temperature changes produced by cooking or to the pungent tastes associated with chilies or ginger. Logan found that "Natural objects, foods and illnesses possess these symbolic qualities and can alter the health of an individual through contact, consumption or contagion" (p. 489). As a result of cultural trait selection, the qualities of moisture have become less significant, but the

temperature dichotomy has increased in importance. The findings showed that belief that one's life is affected by the ever present qualities of hot and cold was widely held in this population and served to guide daily behavior. The author presented an analysis of humoral classification as a cognitive system and suggested that since other investigators have demonstrated that folk health beliefs often challenge and sometimes impede the effectiveness of modern medicine, practitioners should attempt to understand and appreciate folk medical beliefs. If the patient's beliefs undermined the prescribed treatment, the physician should attempt to construct a medical regimen that is satisfactory to both the patient and the physician.

Summary and Conclusions

Thus far, data has been presented that portrayed a holistic view of Indian life in Guatemala. The literature has suggested that the Indian family with bilateral kin has been the major unit of social organization and activity in the Indian cultures. The studies indicated that there was a strict division of labor by sex, with women primarily functioning in the domestic sphere while men attended to agricultural pursuits. Indians were described as being monolingual although this situation was changing as more of them learned Spanish for various reasons. Agriculture and religion have undergone considerable changes as the forces of nationalization, urbanization, political reform and development increased. The processes of Ladinoization were the means by which large numbers of

Indians chose to change their ethnic identity. The data have shown that historically in Guatemala, Indians have been exploited and have experienced discrimination and repression from the wider society. Urbanization, with its subsequent shifts of rural populations to urban centers has resulted in unemployment, underemployment and crowded living conditions in urban areas of Latin America as well as within Guatemala.

The traditional health system was described as a combination of Spanish and classical medicine, sixteenth century Catholicism, and the indigenous religion and magic beliefs of the ancient Maya. Humoral theory, particularly the belief in hot and cold qualities and individual susceptibility to illness as it related to the strong-weak dichotomy were the underlying basis for many health and illness beliefs. Animation of the environment and beliefs in other volitional beings were associated with illness beliefs. Traditional diseases were described as well as traditional practitioners and their modes of curing. More recent studies indicated that modern medicine was being accepted in varying degrees in Middle America.

The literature review has presented information concerning the socio-historical background, the experiences and lifestyles of Guatemalan Indians. The literature concerning the traditional health care systems has provided background information for the interpretation and analysis of the specific findings of this research. The health status of people and the health care systems are a part of the social reality. An understanding of how this social reality came to be will serve as a basis for the evaluation

of the present cultural context, health beliefs and practices, and the way of life which are described subsequently.

CHAPTER III

METHOD

Preparation for the Research

Prior to the beginning of this research, graduate courses in transcultural nursing and anthropology were completed by the investigator; in addition a minimal ability to speak and understand Spanish was attained. A preliminary visit was made to Guatemala in July and August, 1979, to investigate possibilities for research, including selection of a site, contacting various health officials, and to arrange for living conditions.

Background information concerning the cultures of Guatemala, a knowledge of the lifestyles and beliefs and practices in relation to health and illness proved valuable. Association with Dr. JoAnn Glittenberg, Professor of Nursing and Anthropology, University of Colorado, and our many discussions and experiences in this country and in Guatemala, were invaluable in contributing to the adjustment and enjoyment of the research experience.

Participant Observation

Although some modifications were necessary, the traditional anthropological method of participant observation and informant interviewing was followed. The researcher did not live in the

colonia because of family responsibilities and the lack of appropriate living space in San Marcos. Living was arranged approximately one-half mile from the colonia, in El Barrio La Democracia and near the major market center of Quetzaltenango.[1] This proved to be an ideal location for many of the residents of the colonia were vendors in the market, and if persons could not be located at home, they could always be found at work in the market.

Frequent and continuing contact was maintained with sample households and others in the colonia from December 1979 to December 1980, a period of twelve months. Observations included daily behavior and lifestyles, child-rearing practices especially as they related to health care, relationships within and between families, employment activities, domestic tasks, and visits with sample members to health practitioners and health care facilities.

Conversations covered a vast range of topics not covered in the formal interviews. Informants taught the investigator how to live in the Guatemalan culture, not only the norms and values of the society, but the everyday realities of how to cook, where to buy food, how to wash clothes by hand and whom to ask for specific information. In doing so, they also talked about their relationships with their parents, spouses, siblings, and significant others.

---

[1]Unfortunately, a fire completely destroyed this market in December, 1980, and it has since been moved to the fairgrounds (El Campo de la Feria), north of the old site and away from the center of the city; however, references to the market in this paper refer to its location prior to the fire. From recent reports, the municipal government intends to rebuild the market at its former location in El Barrio La Democracia.

They described their life experiences and their hopes and aspirations for their children. They discussed the reality of their lives and how they managed in spite of poverty, joblessness and scant economic resources.

Brink (1976) stated that "when the researcher wants to understand the subject, from the subject's point of view, participant observation is the method of choice. Interviews and questionnaires . . .elicit what people say they think and do, but cannot elicit what a person actually does in a situation" (p. 140). The method of participant observation requires direct contact with research subjects over a long period of time and enables the researcher to confirm or deny what persons say they would do in a given situation. Byerly (1976) described the use of participant observation in nursing settings. She stated that there are certain dilemmas presented by the role which must be considered by any member of a profession engaging in field research. According to Byerly, these dilemmas are: a) objectivity versus subjectivity, b) preservation of the scientific integrity of the study and/or protection of the rights of individuals who are the subjects of the research, and c) nonintervention into the activities of the study group versus intervention which risks changing the course of the findings (p. 148). Although Byerly was discussing research that focused on other professionals in health settings, the concerns she raises are general and need to be addressed as they relate to the methodology used in this study.

Objectivity of Fieldnotes

Pearsall (1965) noted that often the researcher will find herself/himself shifting between the roles of participant-as-observer and observer-as-participant. Fieldnotes for the participant observation portions of this study were recorded twice each day and were transcribed and reviewed nightly to determine what effect, if any, the behavior of the investigator had on the elicited information. Notes were not taken during the conversations so as not to inhibit free response. Detailed notes were taken to facilitate completeness of data during the structured interview sessions. Immediately following an interview, the data were reviewed and more details were added as necessary. Each evening, all interview and sessions were transcribed and reviewed for completeness. Further questions and ideas were detailed for further exploration when appropriate. In addition to fieldnotes, a personal journal was kept during the field study to record data about personal feelings and attitudes. Reviewing this journal weekly was helpful in developing insights into personal behaviors and feelings in the research situation. It also provided an additional check on data gathering and analytical techniques.

Protection of Rights of the Sample Population

All members of the sample population were informed that the purpose of the study was to learn about what happens in their daily lives which affects their health. They were assured that their

participation was voluntary and that opportunities would be provided for questions and further explanation at any point in the investigation.

All sample subjects, eighteen years of age or older, signed the consent form. If the subject was not literate, the letter of consent was read to him or her by the investigator and a mark (X) was obtained in lieu of a signature.

Approval was received from the Review Committee for Research with Human Subjects, University of Utah, for this investigation of activity involving use of human subjects. This approval form provides information regarding methods used to ensure confidentiality and protection of rights of the human subjects.

Intervention on the Part of the Investigator

The fact that the investigator is a nurse and was interested in learning how to improve health care helped to gain acceptance in the colonia. The families asked many questions which were answered as truthfully or as openly as possible as most of them had little to do with the course or the findings of the study. Each incident had to be handled in its own context. Most of the time, the researcher conscientiously refrained from giving advice or intervening in any way.[1] The fact that all conversations were conducted

[1]One incident occurred when an inadvertent suggestion was made. A subject had an open and infected lesion on her foot; she was a diabetic. She was advised to wear white cotton stockings in place of the colored ones she usually wore.

in Spanish was very helpful in this regard; careful thought was required before anything could be said.

Data Collection Instruments

Demographic Data Interview Schedule

Demographic data were collected to describe the sample and to identify the respondent's age, sex, place of birth, number of years lived in the community of Quetzaltenango, marital status, number of children in the family, years of education, occupation and income, spouses' occupation and income, religion, number of women and female children wearing traditional clothes, and languages spoken in the home as well as other places. A copy of the Guidelines for the Demographic Data Interview Schedule is in Appendix A.

Rating Scale to Determine Economic Levels

Previous studies (Hollingshead & Redlich, 1958; Hurley, 1971; Bullough & Bullough, 1972) have shown that in the United States, factors such as income and educational levels of household head and spouse are important indexes of health behavior. Economic status is clearly a major determinant of health and disease in individuals and populations (Basch, 1978). Although "socioeconomic status" usually refers to the amount of money or resources that people have, it involves perceptions and lifestyles also.

For the purpose of gaining a qualitative insight into socio-eocnomic levels, a rating scale was developed to define differen-

tial levels of standards of living within the colonia. This included a survey of selected material belongings in all households of the sample population. Lomnitz (1977) used a rating scale to describe different economic levels; Lewis (1969) collected information on material belongings for families in Mexico City shantytowns. Both demonstrated that even though all families were poor (as measured by income levels), there was considerable variation in socioeconomic levels. Variables such as number of beds per household, religious items and electrical appliances were important indicators of the standard of living within poor Mexican households.

The Economic Rating Scale used in this research is similar to the one used by Lomnitz (1977). Changes were made to accomodate differences in type of housing, furniture, appliances and mode of cooking found in San Marcos. All households were inspected separately and graded according to the rating scale.

The Rating Scale was developed and pretested for validity and reliability with a pretest sample of five households living outside of the colonia, but otherwise similar in composition to this sample. The pretest sample is described in more detail subsequently. A copy of the Rating Scale to Determine Economic Levels may be seen in Appendix B.

Health History Interview Schedule

Questions were asked regarding retrospective and present health histories of all family members including the immunization of children, identification of past illnesses and treatment

actions. This information was deemed important to describe the health status of individual family members, the types of health problems experienced in the past, as well as patterns of health behaviors. Questions were asked regarding the kinds of treatment sought as well as satisfaction with the health services and care obtained. This information provided a comparison of health services from Western-trained physicians and indigenous practitioners as well as expressed satisfaction with the care received.

Data concerning which kinds of illnesses were deemed appropriate for indigenous or scientific care were obtained. Informants' responses provided insights regarding their expectations and satisfaction with the services received. Informants were asked to rate their perceived health status and to explain their choices. Parents were requested to rate the health status of their children. A copy of the Guidelines for the Health History Interview is in Appendix C.

The Health Beliefs Interview Schedule

The major concern at this point of the investigation was to explore with the sample which illnesses were of greatest concern to them and what beliefs were associated with the causation, treatment and prevention of these illnesses. Other investigators, notably Fabrega (1972; 1973; 1975) have stressed the importance of separating the concept of illness from that of disease. Fabrega (1972) stated that "the concept of disease designates altered bodily states or processes that deviate from norms established by

Western biomedical science" (p. 213). In a study in Chiapas, Mexico, Fabrega (1970) asked informants to identify potential illness manifestations which indicated disturbances in bodily processes and functions. This procedure was followed in order to develop illness conceptions for this study. Informants were asked to identify common illness manifestations which provided a general framework for differentiating among illnesses, ideas of causation, appropriate treatment actions and culturally prescribed behaviors to promote health and illness.

Five informants in the pretest sample, all Quetzaltecan Indians, were asked to list common illness manifestations that they, or members of their families, had experienced in the past. A list of 22 illness manifestations was obtained in this manner. The informants were then asked to choose the ten most common manifestations of illness. Using this information, a draft of the interview schedule was developed. Questions were directed to beliefs regarding the causation of each illness manifestation, actions taken to obtain relief, and prevention of each condition. Respondents were asked to rank order the illness manifestations from most serious to least serious and explain their rankings. Questions were developed to elicit responses about common folk illnesses. The Interview schedule was pretested with the households of the five informants; questions were modified and some changes were made in the format of the schedule. A copy of the Health Beliefs Interview Schedule is in Appendix D.

The Family Health Calendar Recording

A family health calendar (FHC) was used to identify those persons who experienced illness, symptoms encountered, remedies used, person(s) suggesting therapy, and person(s) consulted for health advice including contacts with health practitioners.

A structured family health calendar was used in studies by Alpert, Kosa & Haggerty (1967). Ailinger (1977) also used a modified FHC in her study of illness referrals. She modified the instrument to allow patients to describe symptoms in their own words rather than recording illnesses from a provided list. Litman (1974), in a review article on family health care research suggested that while FHC's provide a source of comprehensive health information about the family, there are problems with insufficient compliance and normative influences as to what is deemed important enough to be recorded and what is not. Litman suggested that such instruments are better used in conjunction with other data collection techniques such as focused interviews and subsequent home visits to assist with recording.

During a four-week period of this study, each household in the sample was asked to note the name of the person who experienced illness, symptoms encountered (these were described in their own words), remedies used and the person who suggested the therapy. Questions relating to persons sought for advice and assistance and the past relationships and experiences with such persons were asked to identify the existence of the lay referral network subscribed to by the respondent. Data were sought on choices of health

specialists and health care facilities and why they were chosen to identify the type of practitioner and facility, as well as attitudes towards the care that was received. During this four week period, households were visited every other day by the investigator to ensure complete and accurate data. Household heads or spouses were interviewed to obtain necessary information. All recording was done by the investigator. A copy of the Family Health Calendar is in Appendix E.

Illness Experience Interview Schedule

Persons identified as having been ill during the scheduled four-week period of the FHC recording were interviewed to elicit beliefs regarding causation and interpretation of symptoms and changes in daily life behavior. Questions were asked regarding the kinds of care and assistance that ill persons believed they needed and why. Activities and practices believed necessary to restore health were also elicited. Mothers of children under the age of 18 years were interviewed when illnesses occurred in children. A copy of the Illness Experience Interview Schedule is in Appendix F.

Pretest of Data Collection Instruments

All measurement tools were pretested with Quetzaltecan Indian families living outside of the colonia San Marcos to determine the acceptability and adequacy of the instruments. Five households living in other areas of the city expressed an interest in helping

pretest data collection instruments and in the design of the Health Beliefs Interview Schedule. The original plan was to pretest the instruments with ten families, but lack of time prevented contacting additional households and the information and assistance given by only five households appeared sufficient.

Development of the Health Beliefs Interview Schedule

The pretest households assisted in the development of the Health Beliefs Interview Schedule by listing common illness manifestations. Agreement was reached on 22 items. The informants were then asked to rank the illness manifestations in terms of frequency experienced by themselves and their families. A list of ten common illness conditions was obtained by assigning mean rank scores to each item. All ten illness manifestations had physiological bases. The informants stated that some illnesses could result from psychological disturbances; they agreed that such conditions occurred frequently and two additional items, sadness and crying, were added to the list of illness manifestations. Item number 13, chest pain, had been among the original list of 22 illness manifestations, but had been eliminated by the informants in the ranking process. Because it was felt important to learn if the illness manifestation of chest pain would reflect notions of pain and/or danger, it was included on the final draft of the Health Belief Interview Schedule which contained a nucleus of thirteen illness manifestations.

Validity and Reliability of Instruments

All measurement instruments were pretested with the pretest population. The informants in the pretest households were chosen because they had expressed a willingness to spend time with the investigator and to share their knowledge and interpretation of their own health systems and their daily health behavior.

A most important contribution was the ability of the informants to re-phrase questions which had been originally written in English and then translated to Spanish. The pretest household members were helpful in assisting in the construction of the interview schedules and in phrasing questions which elicited relevant information; this contributed to internal validity of the measurement instruments. A test of external validity was that data obtained by means of the interview schedules were similar to that found by means of participant observation.

Reliability of the instruments was obtained with the help of an assistant who administered the instruments with some of the pretest sample and obtained similar data as the investigator.

Description of the Sample

Survey of the Colonia

This research began with a census of all residents in the colonia. Data were obtained from each household regarding numbers and ages of persons living within each household, the place of birth and ethnic identity of the head of the household. Table 1 shows the data obtained from that survey.

Table 1

The Population and Reported Ethnicity of Heads of Households in the *Colonia*

	N	%
Total population	1442	
Adults[a]	780	54.0
Children	662	46.0
Number of households	218	
Ladino households	51	23.4
Indian households	167	76.6
Quetzaltecan households[b]	78	46.7
Migrant households	89	53.3

[a]All persons 18 years of age or older.

[b]Identified as those households in which the head of household was born in the city of Quetzaltenango as opposed to migrant heads of households who were born elsewhere.

As can been seen from Table 1, there were 218 households residing in the colonia at the time of the survey (June, 1980). The total population of the colonia was composed of 1442 individuals; 54 percent of the population were adults and the remaining 46 percent were under the age of eighteen years. Fifty-one households, or 23.4 percent were Ladino households and 167, or 76.6 percent, were Indian households. Of the 167 Indian households, 78 or 46.7 percent reported that the head of household was born in the city of Quetzaltenango, while 89 or 53.3 percent were born in other areas of the department of Quetzaltenango, or other areas of the country.

The Quetzaltecan Indians can be classified by linguistic criteria as Cakchiquel Indians since Cakchiquel, a subgroup of the Quiche language, was their native dialect. In addition, it should be noted that ethnicity was a reported characteristic. Ladinoization processes were taking place within the population residing in the colonia. Instances occurred where several heads of households identified themselves as indigena (Indian) but their relatives, also living within the colonia, reported their ethnic identity as Ladino.

Sample Selection

The colonia San Marcos, was chosen as the research site because it had been identified as the residence of poor Indian families. The researcher was interested in the many problems encountered by health professionals providing health care services to the

urban poor. An Indian population presented certain variables that should be of concern to health care providers. In addition to poverty, such factors as acculturation, ethnicity, inequality and discrimination affect not only the level of health, but health behavior as well.

In order to ensure that the sample was representative of the criterion variables of socioeconomic status and ethnicity, the following criteria were utilized in selecting a convenience sample within the geographical boundaries of the colonia. a) The head of the household was born in the city of Quetzaltenango. b) The head of the household identified himself or herself as indigena or natural (Indian). c) The head of household was identified by others (at least two informants) as being Indigena Quetzalteco (an Indian born in Quetzaltenango City.) d) The household was of the lower socioeconomic strata. This was arbitrarily defined by the investigator as a monthly income from all sources of Q125.00 or less, for a household of three persons.

To ensure variation and heterogeneity within the sample, households were purposefully selected that showed variation in household composition, age and sex, lifestyles and living conditions.

The sample was composed of 22 households (134 individuals) who resided in the colonia San Marcos, Quetzaltenango, Guatemala. The household was chosen as the unit of major focus for study. Lomnitz (1977) defined the household as "a social group distinguished by three semi-independent variables; kinship, residential proximity, and domestic functions" (p. 99). This definition is relevant when

dealing with new types of settlements that arise under the special conditions of land tenure and occupancy often found in Latin American cities where conditions of poverty and insufficient living space have produced different kinds of residential patterns and living arrangements. The households in the sample were comprised of one or more nuclear families; some households were inter-generational and lived in single residential units or in several adjoining units. The 22 households in the sample contained 11 separate nuclear families and 11 extended families of various compositions. In total, there were 36 nuclear families (as opposed to households) in the sample.

A total of 22 households provided a data base large enough for some generalizations in those factors which were common to the entire group. Most importantly, it was possible for one investigator to interview 22 households and obtain the kind of indepth information that was relevant to the purposes of this study.

Fifteen families volunteered to participate in the research at the initial contact made with the investigator during the census survey. The remainder of the sample population was selected by referrals from sample families to their kin or neighbors or through chance encounters in the colonia.

Characteristics of the Sample

Table 2 shows the age and sex of the individuals in the sample. The sample was almost equally divided by sex and varied by age, with the largest age grouping concentrated in the 1-5 and 20-24

Table 2

Age and Sex of Sample Population

(N=134)

Age	Males	Females	Total	Percentage
0-1 years	2	4	6	4.5
1-5 years	15	10	25	18.7
6-10 years	9	6	15	11.2
10-14 years	6	5	11	8.2
15-19 years	3	4	7	5.2
20-24 years	9	12	21	15.7
25-29 years	6	8	14	10.4
30-39 years	6	4	10	7.5
40-49 years	3	6	9	6.7
50-59 years	5	4	9	6.7
60-69 years	1	3	4	3.0
70 years or more	1	2	3	2.2
Total	66	68	134	100.0

year olds. It is primarily a sample of younger persons; 85 persons were below 24 years of age and 49 persons were 25 years of age and older.

Religious Preference

Table 3 shows the reported religious preferences of members of the sample. Table 3 shows that of the 73 persons in the sample population 18 years of age or older, 50 persons were members of the Catholic church, 18 persons were members of one of the Protestant groups, and 5 persons reported other religious preferences (1 no religion, 1 Mason, 1 Mormon, and 2 "Independents"). Of the 22 heads of households in the sample, 15 reported being affiliated with the Catholic church while 7 heads of households were Protestant.

No Catholic male member of the sample reported involvement with the local Catholic organizations. Three older Catholic men reported that in the past they had participated in the Semana Santa (Easter Week) processions. Nothing resembling the cofradías or political-religious hierarchies existed in the Catholic church at the colonia. Protestant men and women of the sample reported considerable participation in religious activities.[1]

Language

Table 4 shows the languages spoken by individuals in the

---

[1]The researcher was invited to describe her research activities in a culto (meeting) at the Protestant church in the colonia. As a result, three households volunteered to participate.

Table 3

Religious Preferences of All Persons in the Sample

18 Years of Age and Older

(N=73)

Age	Catholic	Protestant	Other
18-29 years	24	10	2
30-50 years	12	7	3
50 years and more	14	1	
Total	50 (68%)	18 (25%)	5 (7%)

Table 4

Languages Spoken by Persons in the Sample

(N=103)

Age	Only Spanish	Spanish and Cakchiquel
5-19 years	33	0
20-39 years	42	3
40-59 years	13	5
60 years and more	1	6
Total	89 (86%)	14 (14%)

sample households. It is evident that the majority of sample members were monolingual in Spanish. The three individuals, ages 20-39 years and who spoke Cakchiquel were women born in rural areas of the department of Quetzaltenango[1]. They married men who were Spanish-speaking only and moved to the city to live with their husbands' families. The Quetzaltecos born in the city and able to speak Cakchiquel were all 40 years of age or older.[2]

Style of Clothing

The style of dress varied in the colonia. All men wore western style clothing. The women's style of dress varied for a number of reasons. They are immediately recognized as Indians if they wear the traje. In a society where discrimination is often overt, it is sometimes better not to be recognizable as a member of a minority group. Most women were reluctant to admit that they did not want to be identified as Indians by their mode of dress. They reported that they did not wear the traje because it was so expensive. The huipil (blouse) costs from Q75 to Q100 and the skirt is Q40. They could purchase five or six modern style dresses for

---

[1]There were a total of ten women in the sample who were born outside of Quetzaltenango City. No Quetzalteca woman in the sample had married a person born outside of the city. This may reflect both the increased mobility of Quetzalteco males and the tendency for young women to reside in their parents' home until marriage. They would have few opportunities to meet and marry someone residing outside of the city.

[2]One of these sample members was asked why he had not taught his children to speak Cakchiquel. He pointedly replied,"When they want a job, they'll have to ask for it in Spanish, not Cakchiquel."

that amount of money. Women also noted that modern clothes come in many styles and they are easy to launder. The impression was that, on the average, the affluent Ladino women of Guatemala were very clothes-and-style conscious. In an attempt to imitate the predominate cultural group, and considering the convenience and economic factors, many Indian women were now wearing modern clothes and assuming modern hairstyles.

Young children wore second-hand or inexpensive clothes. A few of the more traditional Indian families still dressed young girls in the traje, but as a rule, children were dressed in cheaper western clothes that were easy to launder. Synthetic fabrics and plastics were dominant; poorer women, as well as children, characteristically wore sandals made of molded plastic. A few older Indians, both male and female, went barefoot during the warm weather.

Table 5 shows the clothing style of females above three years of age in the sample population. As can be seen, the majority of young girls wear modern style clothing. Women above the ages of 15 years showed a slight preference for modern clothing also, with 38.3 percent wearing modern clothes as compared to 30.3 percent preferring the traditional dress. The most striking difference is in the younger age group with only two young girls, both from the same family, wearing traditional clothes.

Summary and Conclusions

In summary, the methods of participant observation and

Table 5

Clothing Style of Female Members of Sample Population

(N=60)

Years of Age	Modern Style		Traditional Dress	
	No.	%	No.	%
Girls, ages 3-14 years	17	28.3	2	3.3
Women, Ages 15 years of age, or older	23	38.3	18	30.0
Total	40	66.6	20	33.3

informant interviewing were the methods used to collect data. Data were collected about demographic and economic variables to describe the sample. Health histories were obtained on all sample members to describe past health histories and patterns of behavior.

Health beliefs and practices were ascertained by means of three data collection instruments: a) the Health Belief Interview Schedule which elicited beliefs and practices related to common illness manifestations; b) a Family Health Calendar Recording which identified those persons experiencing illness, symptoms encountered, remedies used, person(s) suggesting therapy and person(s) sought for help and advice; and, c) an Illness Experience Interview Schedule which elicited beliefs and practices regarding the illnesses identified by the FHC. All instruments were pretested for validity and reliability with five pretest households.

A convenience and purposive sample was selected that consisted of 22 Quetzalteco Indian households or 134 individuals. All lived within the geographical boundaries of the colonia San Marcos in Quetzaltenango, Guatemala. The sample consisted of 66 males and 68 females. Sixty-eight percent of the sample over the age of 17 years were Catholic, 25 percent were Protestant, while the other seven percent listed other religious preferences. Eighty-six percent of the sample were monolingual in Spanish. The majority (66 percent) of women and young girls wore modern clothes while 33.3 percent wore the traditional Indian dress. Other sample characteristics such as economic status, occupation, education and living arrangements are discussed in the following chapter.

CHAPTER IV

ANALYSIS OF SOCIAL AND ECONOMIC DATA

Introduction

This chapter contains the findings obtained from the demographic interview schedule, the economic rating scale and ethnographic data that were collected over the twelve month period of the research project. The colonia and the people who live there are described in depth. Their lifestyles, living conditions, and way of life are portrayed with emphasis given to economic conditions and living arrangements. Since the sample utilized in this investigation consisted of poor Indian families, an effort will be made to describe their lives, their aspirations and the strategies they have developed to cope with living under adverse circumstances.

Two important assumptions are operative; one is that poverty has an adverse affect on the health status of people. Secondly, families play an important role in maintaining the health of individual family members. This chapter sets the stage for further analysis of health and illness data and will provide some understanding of how the sample families lived and a descriptive account

of the human conditions found in the colonia.

Life in the Colonia

San Marcos, like many poor neighborhoods in urban areas, is hidden from the casual observer. It becomes visible only after crossing over a small hill and looking down across the ravine. The initial impression is of an assemblage of low, single-story adobe houses scattered along the edges of two large ravines and extending upwards towards the slopes of small hills which flank the northern side. Clumps of large pine trees are clustered along the slopes of the hills, but no trees grow in the colonia itself. Many of the houses are painted in shades of blue, green and pink; even the unpainted adobe structures with their natural brown colors add to a picturesque impression. A closer inspection reveals the familiar signs of poverty. The ravines are littered with garbage and the bodies of dead animals. Many of the homes have lean-to rooms made of rusty tin and metal scraps. Pieces of metal, abandoned cars, bricks and old plumbing fixtures are strewn about in apparent disorder. On warm days when the sun is shining, there is a characteristic shantytown smell, compounded of garbage, fecal material, refuse and cramped living quarters.

The colonia is extremely dry and dusty from November through April, the dry season. Huge, choking clouds of dust billow out behind each car that enters the colonia. Some of the male residents routinely tie a handkerchief over the lower portion of their faces when they go out into the streets. Women usually hold a scarf to

their faces, and turn their backs when cars come towards them. Mud is everywhere during the rainy season. It is tracked into houses; it splatters on clothing and it turns the roads into rutted, perilous quagmires. Residents say the rain is preferable to that of dust. One can at least wear a heavy sweater or coat and carry an umbrella. There is no escape or adequate protection from the dust.

The dwellings are mostly adobe; a few of the newer ones are made from cinder block. About two-thirds of them have been painted or white-washed. They are located just a step or two from the street. Houses vary according to the economic resources of the family, the materials used, and the type of construction. Few of them have windows opening to the street; one home usually directly joins the wall of another which is painted another color to indicate the demarcation line.

Although the style varies somewhat, the usual home is entered through a door directly on the street. The main room is a combination bedroom-living room. The furniture is sparse and simple, consisting of beds, benches, a few chairs and wardrobes. Most of the floors are cement or cement tile, although a few are hard-packed earth. Clothes and miscellaneous belongings are hung on walls or stored in boxes. Outdated calendars, usually with religious pictures or scenes, are used to add decoration to the walls. Catholic families have small shrines with a saint or other religious items along with family photos displayed prominently on bureaus or tables.

Usually each room has a door which opens directly onto an

enclosed patio. The door is left open during the day and a fabric or plastic curtain hangs across the opening for privacy. Most residents grow flowers or plants in tin cans placed around the edges of the patio. On every patio there is a pila. Pilas are tub-like structures used for washing clothes, dishes, and bathing purposes. They are made of cement and can be purchased in shades of blue, green, red or turquoise. They are about three feet high, four feet long and two feet in width. They consist of three sections; a cistern in the middle portion which holds 20-30 gallons of water and a combination sink-scrubbing board on either side. They are found in every Guatemalan home; even upper-class homes with modern kitchens and laundry rooms with washing machines and dryers have a pila somewhere in a back room or on the patio. In San Marcos, a home with an adequate supply of running water turns the pila into a source of additional income for the housewife. She may take in the washing of her neighbors or charge them Q2.00 per month to use her pila and water. For those families without water, the women and children make many daily trips to the community water faucet to carry enough water to fill the home pila for domestic purposes. Clotheslines and bushes with dripping laundry are seen on every patio.

Many households have only lean-to kitchens with wood fires used for cooking purposes. Even those households with kitchens and gas stoves have areas outside for cooking the corn used in making tamales and tortillas. The corn must be boiled four or five hours with lime to soften it before it can be ground and used in food

preparation. Gas used for cooking purposes can be very expensive and the women tend to use wood if heat is needed for any length of time.

During the daytime, radios blare from nearly every door and patio. Women and young girls are busy washing, cooking, and tending the small children playing in the streets and patios. Since there is no refrigeration, women visit the market each morning to purchase food for daily consumption. There are many small tiendas (stores) in the colonia where it is possible to purchase an ounce of cooking oil, one egg, or a cup of sugar. Most women plan their food intake and grocery money on a daily basis.

A typical day in San Marcos starts before sunrise, especially for the women, as many of them arise as early as 4:30 a.m. to begin washing clothes. They wear heavy sweaters and scarfs and their hands and forearms quickly become red and cold from scrubbing laundry in the cold water.

Breakfast is usually around 6:00 or 7:00 a.m. and consists of oatmeal cereal, coffee, and bread. Few families can afford to eat eggs frequently; the poorer families may have only tortillas and chimul (hot chile sauce) with sweetened coffee for breakfast. Most men and women who work outside of the colonia leave for work around 7:00 a.m. Many walk up to two or three miles to work, others take the bus. Many of the men, especially the younger ones, have bicycles which they push until they cross the slopes of the ravine. At about the same time, women and children form long lines in front of the two community water faucets. The public water

faucet is the informal meeting place of the colonia and there is a great deal of exchange of news and gossip while waiting in line. Most of the women follow the traditional custom of carrying the heavy water jugs on their heads, leaving their hands and arms free. A few Ladinoized Indian women say they would be ashamed to be seen carrying a load on their heads; they prefer to use a bucket and carry it by the handle.

The housework is done, along with shopping, in the mornings. A great deal of time is spent preparing the mid-day meal because the preparation of Guatemalan food is rather time consuming. Most workers have a two-hour lunch break and return home to eat and rest. Women who work in the market often take the family lunch with them and husbands join them during the mid-day break.

Children, especially young girls, participate in the household chores and help their mothers tend the smaller children. Boys are sent to carry water for it takes many trips to fill the pila with sufficient water for domestic use. Working mothers often take their children with them or, depending on their work situation, leave all but the baby at home with the oldest child. There are two school shifts; some children go in the mornings and the others go in the afternoons. There are also a few gangs of adolescent boys of school age who no longer attend school and who do not have jobs. They often loiter in front of a small store or against a wall in one of the streets, talking and joking.

By mid-morning, the colonia is bustling with activity. Street vendors selling a wide variety of items, including foodstuffs,

offer their wares. Women are on their way to market and those few residents who are employed in business establishments are on their way to work. Children are still carrying water or going to the stores on errands for their mothers. Around noon, the children who go to school in the afternoon start washing up or bathing at the pilas. They eat a lunch of soup, rice and tortillas before leaving for school. Two or three times each week, depending on the family finances, the family will have soup with chicken or meat. Women who are not working have more leisure time in the afternoons and there is a great deal of visiting among relatives and neighbors.

Television is an important cultural influence in the colonia. Children watch television after school; if they do not have a set at home, and most of them do, they visit with a neighbor who has one. Most importantly, the women say that television tends to ensure the presence of men in the home after working hours. Television sets are purchased for a small down payment and families make monthly payments for two or three years. Reposession of television sets, furniture and household appliances is common when unemployment occurs.

Between 6:00 and 7:00 p.m., residents return to the colonia after the working day. There is a light evening snack of bread and coffee, sometimes tamales, or fried platanos. Most residents watch television for a little while before an early bedtime.

Sundays and holidays differ from weekdays mainly because of the presence of men in the colonia. Many families attend church services in the colonia or at another church in the city.

Protestant families tend to go to church as a family group more frequently than Catholic families, who tend to visit a church as individuals to utter a quick prayer or to light a candle.

Many men drink over the weekend. It is always done with male friends and nearly always to the point of intoxication. Groups of men may go to the movies or to a soccer game on a Sunday afternoon while the women and children visit relatives. Young couples with a few children may visit a local park in the city or visit relatives in another town. As more children arrive, women and the children tend to stay at home. Television and the radio, along with visiting relatives who live near, are major sources of diversion.

Economic Conditions of the Sample

The ethnographic information presented thus far has provided an overview of life in the colonia San Marcos. The next section is focused on the sample and specifically on their economic situation. Since the sample was selected in part by means of economic criteria to insure low income families, economic insecurity was an integral part of daily living for the individuals that participated in this research project. The data presented here includes information regarding occupational structure and standard of living and how these two variables are associated with income, educational level, population density, productivity and other factors.

Occupational Structure of the Sample

A survey of households in the sample revealed that the gross occupational structure was roughly as follows: 64 percent of heads of households were semi- or unskilled laborers; 14 percent were in commercial or service occupations; 10 percent worked in industrial positions and 14 percent were in other categories (two office workers and one campesino).

The individuals included in Table 6 represented exclusively heads of households in the sample. There were many more individuals within each household, men as well as women and children who were working outside of the home. Two of the women heads of households had no employment outside the home. One was supported by a young working granddaughter who resided with her and the other one managed somehow on charitable assistance from her church and the small earnings of her two young grandchildren who performed various odd jobs.

The category "unskilled worker" included manual laborers, garbage workers, house painters, bus drivers' helpers, street sweepers, and others who generally performed the more menial tasks of society. They earned considerably less than the minimum wage and had no job security. In addition, their work usually was limited to a few hours per day with no guarantee of daily work. This type of labor has been described by Lomnitz (1977) as "peon's work." She stated "a peon is an unskilled laborer who works at a wide variety of occupations, according to unforeseeable demand. Peons are subject to random periods of employment" (p. 64).

Table 6

Occupation of Heads of Residential Units

At the Time of the Survey

Occupation	Number	Percentage
Men		
Unskilled worker	1	5.6
Skilled free-lance worker	9	50.0
Industrial worker	2	11.1
Office Employee	3	16.6
Commerce (vendors or shop-keepers)	2	11.1
Campesino	1	5.6
Total	18	100.0
Women		
Domestic worker	1	25.0
Traditional occupation	1	25.0
Housewife (no independent income)	2	50.0
Total	4	100.0

The individual shown in Table 6 as an unskilled worker was a 55 year old man named Oscar[1]. He worked at various odd jobs around the market center, helping load produce, arrange various goods and performing custodial services. He was paid by the job and averaged Q35 take-home pay per month. His wife, Silvia, took in washing from her neighbors in the colonia and earned Q20 per month. One son, a brickmaker, earned Q100 per month. Another son worked in construction and earned Q80; the third son, a bus driver's helper, earned Q75 per month. A daughter-in-law earned Q30 as a part-time domestic servant. The average monthly combined income for this household of 14 persons was only Q435. All workers in the household were in the unskilled worker category, although only Oscar as head of a household was included in Table 6.

A "skilled free-lance worker" was a peon who had become specialized in a certain line of work in any number of trades. He might have been a baker's assistant, a shoemaker, a driver, a carpenter, construction worker or a repair man. Many of them worked either on a daily basis or a job-rate basis, according to demand and without job security. Their income was slightly higher than that of a peon since skills are involved, but because the demand for their skills was variable, they tended to lack a stable income. A few had a steady clientele, but even so the number of clients was too small to ensure daily work the year around.

Fifty percent of male heads of households in the sample were

---

[1]As elsewhere in this dissertation, the actual names of the individuals have been changed.

in the category of skilled free-lance workers. Daniel, a 31 year old father of four, worked as a brick maker and earned Q20 per month. His wife worked as a vendor in the market and contributed Q25 each month to the household income. Pablo, age 27, supported his wife and three children on Q65 per month that he made as a shoemaker. Another shoemaker, Carmelino earned only Q35 per month. His salary was augmented by his wife's sewing abilities. She earned Q15 to Q30 per month to help support the family of three persons. Both Carmelino and his wife worked at home in their one-room house.

"Industrial workers" were those persons who enjoyed a certain amount of job security because of their employment in industrial concerns. They held relatively secure jobs with stable incomes but were at risk of losing their jobs because of illness or some other calamity. Two heads of households were in this category. Raul, a 36 year old father of two, earned Q100 per month in a knitting factory. Occasionally, with overtime, he earned up to Q125 per month. He also had skills as a shoemaker, a trade he practiced in his home in the evenings and on his day off, earning an additional Q10-Q15 more each month. His wife had a food service in the market, contributing Q20 per month to the household finances. In addition, they had a small store in their home which was open in the early morning and evening hours, bringing in an additional Q15-Q20 per month. Edgar worked in a distillery earning Q110 to support his wife and child. This particular household was the only one in the sample with health insurance coverage at the place of

employment.

Only two heads of households were classified as "employees." Ricardo, age 43, supported his wife and three children as an employee of the city administration. He earned Q125 per month and was the only person in the sample to be covered by social security benefits. Carlos, age 39, supported a wife and three children as an office worker. He earned Q150 per month, the highest salary of any individual or head of household in the sample.

"Commerce workers" included vendors or shopkeepers. Vendors sold miscellaneous household items or food in the market or to stores throughout the city. These persons were self-employed. Hupp (1969) noted that Quetzaltecan Indian merchants dealing in food products and cheap clothing have managed to gain control of local sales in these two economic areas by underselling Ladino merchants. The unfortunate aspect of this is that dealers in food and clothing concerns often become associated with the Indian population and such businesses were viewed by Ladinos in a derogatory manner as "Indians' work." Middle and upper class Indians in Quetzaltenango were associated with the more economically successful food and clothing businesses. For many poor Indians, a private business venture was viewed as the first step to eventual financial success. Two heads of households in the sample were commerce workers. Ramon, age 27, had gradually assumed responsibility for his father's clothing store, which was located in the market. His wife and his father assisted in the store on a part-time basis, allowing Ramon time to take his merchandise to markets in other cities. His wife also

made and sold embroidered blouses in the store. The family business averaged a profit of Q160 per month to support a household of seven persons.

Paco supported his wife and child with a small candy selling business. He had a bicycle with a large rack attached to the back. He visited small stores in the city on a weekly basis selling various kinds of candies carried in a huge box strapped to the back of his bicycle. He earned a profit of Q60 per month.

The one household headed by a campesino had no regular monthly income. The family received approximately Q10 - Q20 per month from the sale of corn or other farm produce to their neighbors. This family was somewhat unusual, in that they owned land and farm animals that enabled them to be fairly self-sufficient. The head of the household, Gregorio, lost an arm in a factory accident ten years before. He purchased enough land to support his family with the compensation money he received as a result of his injury.

There were four households in the sample headed by women. Celeste earned Q10 per month by working at odd jobs, usually involving domestic services. She also tended her two grandchildren while her daughter worked full-time as a domestic servant, earning Q40 per month. Together they supported a household of seven persons, including two teenage boys who had been unable to find work.

Teresa, had the "traditional occupation" of dulceria (candy maker). She made several kinds of dulces (candy) in her home and sold it to small stores in the city and adjacent towns. Her gross receipts were Q100 per month, from which she purchased

sugar, coconuts, and other supplies necessary to keep her business going. Her husband deserted her years before, leaving her with seven young children. She supported her family through the years by making and selling candy. The household now consisted of 14 persons, seven of whom, including Teresa, earned a combined household income of Q510 per month.

One of the "housewives" was a 74 year old woman who tended her great-grandson while her granddaughter worked for Q40 per month as a domestic in a factory. The other "housewife" had no income. She cared for her two grandchildren and the only cash they had was when the children sold peanuts in a homemade stand in the Central park or when they could find odd jobs shining shoes or carrying water. This family were members of the Mormon church and received a monthly allotment of food and occasionally used clothing from the church welfare program.

An analysis of the occupations of household heads in the sample affords some interesting generalizations. The minimum legal wage in Guatemala at the time of the study was Q107 per month. The average monthly wage for the heads of households in the sample population was Q67.36, a figure considerably lower than the minimum wage. Four heads of households earned more than the minimum wage; eighteen household heads earned below the minimum wage.

For many lower economic class Indians, the only type of work available was unskilled or semi-skilled labor. Even for those persons with some specialized skill, such as shoemaker or construction worker, economic reimbursement was not continuous or adequate.

In addition, the category of "free-lance skilled worker" was a terminal level occupation; there was no advancement or access to other forms of employment or skills. For those who began their employment careers as "unskilled," the future was particularly bleak. They remain unskilled marginal workers all of their lives.

Women who were heads of households were in a particularly vulnerable position. It is not possible to generalize from only four households but data from other families in the colonia and city proper was that older women had access only to jobs involving domestic services. Even those younger women who were involved in commercial activities made considerably less money than men.

The intensive use of unpaid family labor in the colonia was an integral part of the economic system, and without it many families could not survive. As Lomnitz (1979) has noted, a large family has a positive economic connotation in poor populations in Latin America. This is due to the widespread use of unpaid child labor, as well as the utilization of relatives for emergency assistance during periods of loss of work. Children and women represented a small but important and continuous source of income to a family. Young boys could shine shoes or sell matches, cigarettes, candy or other small items in the market. They could carry water, freeing their mothers for other tasks. Girls could help in the home and with child care. They accompanied the mother to the market to assist with selling or tended the other children while the mother was occupied. Both boys and girls helped with the domestic animals and skipped school whenever the economy of the

household needed them.

Practically all women obtained some income from cooking and selling tortillas or tamales, raising pigs or chickens, sewing, collecting tin cans and bottles for resale, and so on. Old people took care of the home, tended the children while the mother was out working, or earned small sums of money as vendors of small quantities of goods, soft drinks or other items at sidewalk stands. Nearly all families had a few chickens, and pigs, sheep, cows, and turkeys were not uncommon. They represented an important source of added income and cash reserve, as well as a source of protein in the family's diet.

Difficulties occur when atttempting to analyze the contribution to the household economy of the unpaid labor of children, women, old people, and other relatives within the household. Of the 22 households, 17 contained female spouses of the head of household, four were headed by single women and one household by a single man, a widower. Of the 17 female spouses, 8 or 47 percent had no income of their own. However, work and independent income were not always related. For example, the wife of the campesino participated with her husband in the farm labor--working in the fields, hoeing corn, hauling water, as well as having total responsibility for the domestic responsibilities of washing clothes, grinding corn, food preparation, etc. When the agricultural products were sold, it was the husband who did the selling and the money received in exchange for the corn was considered his money. His wife and daughter raised a few chickens; a grandchild who was in rather frail health

was given two or three eggs each week. The others were sold to the neighbors and the Q2 or Q3 earned every month was divided between the two women. Of the other female spouses who reported independent incomes, all were below Q25 per month.

Although the pattern varied somewhat, most men gave their wives a fixed amount of money each week to purchase food and household supplies. This varied depending on the stability of the husband's work situation or other unpredictable occurrences, such as drinking behavior. All female spouses in the sample knew the amount of money their husbands earned. The money that a woman earned was considered hers to spend in whatever manner she chose. Most women spent their money on food, clothes, or household items. They carried their money in small purses tucked inside their dresses, or hid larger amounts somewhere in the house. No members of the sample households utilized the local banks; many women reported that they had never been inside one.

Unmarried women who worked usually contributed some money to the household budget for food and baby tending services. A large portion of their income was spent on clothes, jewelry, makeup, and shoes. Unmarried men also contributed money to the household expenses and spent what was left on movies, alcohol, cigarettes, and clothes.

Economic Levels in the Sample

For the purpose of gaining a quantitative insight into socio-economic conditions, a project was carried out to define the

differential economic levels or standards of living within the colonia. This projected included a survey of selected material belongings within each household. All households were inspected separately and graded according to the rating scale in Appendix B. Each variable (housing, furniture, electrical appliances and type of stove) was graded on a scale of three, as follows: 1 = good, 2 = fair, 3 = poor. The appliances were rated on a "yes" or "no" basis. Type of stove was rated as either "wood" or "gas."

As can be seen from Table 7, all four variables were in some way indicators of the standard of living of the household. Four households were in Level A, indicating the highest level of standard of living. Two households were in Level B, while six households were in Level C. The differentiating factor between the households in Levels B and C was the possession of either a food blender or sewing machine, two items highly valued by the women in the colonia. Level D, containing ten households, differed from Level C in the poor condition of the houses, lack of furniture and appliances and the use of wood rather than gas for cooking purposes. A definite boundary line separated the middle range families from the poorer families, or between Levels B, C, and D with differences in the three variables of housing, furniture, and stove. The possession of electrical appliances appeared to be the differentiating factor between the two middle groups, Levels B and C.

Case Histories

The following case histories are presented as typical for each

Table 7

Stratification of Economic Levels

in the Sample

Residential Units				Variables			
Level	Score	Number of Households	Percentage	Housing	Furniture	Appliances	Stove
A	4	4	18.2	Good	Good	Yes	Gas
B	5-6	2	9.1	Ave.[a]	Ave.	Yes	Gas
C	7-8	6	27.3	Ave.	Ave.	No	Gas
D	9-10	10	45.4	Poor	Poor	No	Wood

[a]Ave. indicates Average.

of the economic levels found in the sample.

Level A. Ricardo Parra, age 49 and his family live in a five room home that is large and spacious by colonia standards. The family consists of Don Ricardo and his wife, three unmarried sons, ages 20, 16, and 14 years respectively, and the oldest son, Carlos, age 25, his wife and two preschool children. The house has three bedrooms, one for Sr. Parra and his wife, one for the three unmarried boys; the other is used by Carlos, his wife and children. There is a kitchen with a stove and dining room furniture purchased from a local furniture store. Most living rooms in the colonia contain several beds. The Parras have a room used exclusively as a living room. It contains a sofa, two overstuffed chairs and several wood chairs. There is a table with religious items and candles. There is a large patio, many flowers, a large dog, and some chickens. The house is made of adobe and is painted blue; all rooms have cement tile floors; the patio is cinder block. There are both lights and water in the home. Appliances include a food blender, a sewing machine, two radios, an iron and a television set. Sr. Parra works in the city water department; Carlos has a steady job as a car painter. The Parras live as an extended family, sharing the domestic tasks and household expenses. Sr. Parra earns Q125 per month; Carlos earns Q150. The two women are not employed outside of the home, nor do they have any income of their own. The family is Catholic; Carlos' wife takes the children frequently to services on Sunday morning; the other family members attend infrequently. Sr. Parra does not drink and could be described as "family oriented" in that his leisure time is spent with his family. Although he has had only four years of formal education, he has an interest in national and world concerns, or what is happening outside his circle of personal acquaintences and the local area. He is one of two persons (both male) who reported that they voted in the last presidential election. Carlos, the married son, drinks frequently; he often does not come home until late in the evenings and spends weekends drinking with his friends.

Level B. Pablo Cardona, age 26 years, supports his wife Gabriela, and two young children on a salary of Q90 per month as a construction worker. He feels he has been fortunate to have had steady employment in the past year. The family lives in a two room home made of cinder blocks. There is electricity, but no running water. One room is a combination bedroom-living-dining room. There are two double beds, some wooden chairs, and a metal dining room table. The other room, a kitchen, was a recent addition

this past year. Most of the work on the kitchen was done by Gabriela's younger brother. The family has purchased a gas stove; they paid Q50 down and will pay Q20 per month for a total of Q450. The family has an old treadle sewing machine given to them by Gabriela's mother. Gabriela spends her day tending the children, ages three years and six months. Since the baby is in diapers, Gabriela goes every day to wash clothes at the community pila which is located about two miles from the colonia. This task takes about four hours every day. She carries the baby in a shawl on her back, the clothes on her head in a plastic wash basin, and helps the three-year-old along by holding his hand. In addition, she carries water for domestic purposes from the water faucet which is about one-half mile from her house. It is uphill on the return trip. She makes 5-6 trips for water each day, carrying the water jug, the baby, and followed by the toddler. Pablo spends his free time with his friends, visiting, going to movies, or occasionally drinking. If Gabriela has free time on a Sunday afternoon, she may take the children and visit her mother who lives in another zone of the city.

Level C. Francisco Gonzalez, age 47, earns Q50 per month as a self-employed carpenter. He and his wife, Albertina have four children, ages 14-22, living at home. The oldest daughter, Blanca, has a three year-old child. She works as a domestic, earning Q60 per month. Jorge, the oldest son, works as an apprentice to a brick-layer and averages Q30 per month in take home pay. The other two teenagers, a boy and a girl, are looking for work and occasionally are able to find unskilled jobs that last a few hours or a day or two. The boy helps his father with the carpentry business and the girl assists her mother with the housework. The family live in a two room house, one bedroom, and one combination dining room-bedroom with a lean-to kitchen. There are beds, a dining room table with chairs and closets. The rooms have cement floors. Sr. Gonzalez works at his carpentry trade on the small dirt patio. The home has lights, but no water. Sra. Gonzalez tends her grandson and is responsible for the major share of the domestic responsibilities. The children, basically all young adults or adolescents, spend as little time as possible in the home, preferring to be involved in peer group activities. The family owns an iron, a radio, a television set, consumer items that can be found at any economic level in the colonia.

Level D. Celeste Carrera, age 45, lives with her four children and two grandchildren. She left her husband eight years ago because he reportedly drank a lot, beat her, and would not give her any money. She described him as a

"mal hombre" (no-good man). Her oldest daughter, Margarita, has two children and is the major economic support of the family. Margarita works seven days every week as a maid for a wealthy Ladino lawyer and his family. Occasionally, they will allow her to leave her work place a few hours early on Sunday afternoons. Last year she worked all holidays, including Easter week, Christmas, and Independence day. Celeste tends the two grandchildren and works whenever she can by doing washing, ironing, cleaning, etc. The three boys are all looking for work. The youngest one occasionally shines shoes in the Central park, but lacks money for adequate shoe-shine supplies. Another son, Edjar, was promised a job as kitchen helper in a cafe in Escuintla, in Central Guatemala. After working six weeks and not receiving any money, he returned home. Alfredo, the oldest boy at age 21, has never held a steady job in his work career. The three boys have completed three years of primary school and have no job related skills; they are usually in the streets of the colonia, visiting or joking with other unemployed youth. Their home has no lights or water; the family use candles in the evening. The family is one of two in the sample which does not own a television set. They often visit a neighbor in the evening to watch their favorite programs. The home has only one room with a dirt floor. It contains four double beds, a closet and one chair. There is barely walking space between the furniture. Outside on the patio there is a lean-to kitchen where Celeste prepares the meals over a wood fire. Her most cherished possession is a pressure cooker which was given to her in lieu of money when she worked a few days for an American missionary family. At the time of the survey, she did not know how to use it, but understood that food could be cooked very quickly, and therefore, economically with it.

Occupation and Economic Levels

The economic level indicators shown in Table 8 may be used to illustrate how various aspects of the standard of living were related to the type of occupation of the heads of households in the sample population. Table 8 shows that the occupational structure in Level A was the exact reverse of Level D. Level A included the industrial workers and office employees, both of whom enjoyed a comparatively high income and steady employment. Level D included all

Table 8

Occupation and Economic Level of Household Heads in the Sample Population

Occupation Category	Level A		Level B		Level C		Level D	
	No.	%	No.	%	No.	%	No.	%
Unskilled worker					2	9.1		
Skilled free lance worker			2	9.1	2	9.1	5	22.7
Industrial worker	2	9.1						
Office employee	2	9.1						
Commerce					2	9.1	2	9.1
Unemployed							3	13.6

of the unemployed, approximately half of the skilled free-lance and commerce workers, none of which was found in Level A. Levels B and C were intermediate and included skilled free-lance workers with higher incomes and greater job stability, commerce workers and two unskilled workers.

Income and Economic Level

Monthly income per household depended largely on the number of actual workdays in a month and the number of workers per residential unit. If monthly income of the head of household was used as the only measure of income, there was a relationship between economic level, or standard of living and the income of the household heads as demonstrated in Table 9.

Table 9 shows that 18 or 82 percent of the heads of households earned Q100 or less each month. These households occurred in Levels B, C, and D. Of the ten households in Level D, 80 percent of these heads of households earned less than Q60 per month. There was only one household (occurring in Level C) where the head of household earned less than Q100 per month. In Level A, all of the household heads had incomes above Q91 per month, with 75 percent in Level A earning more than Q100 per month.

The skew of the distribution of incomes was at least as significant as the mean income. In Levels C and D, incomes were skewed toward the lower end of the income scale; thus the modal income, which occurred most frequently in the sample, was lower than the average. In Levels A and B, incomes were skewed towards

Table 9

Income of Heads of Households and Economic Levels in the Sample

Monthly Income of Head of Household	Level A		Level B		Level C		Level D	
	No.	%	No.	%	No.	%	No.	%
Less than Q39.			1	4.5	2	9.1	3	13.6
Q40-50					1	4.5	2	9.1
Q51-60							3	13.6
Q61-70							1	4.5
Q71-80								
Q81-90					2	9.1	1	4.5
Q91-100	1	4.5			1	4.5		
Q101-125	2	9.1	1	4.5				
Q126-150	1	4.5						
Mean Monthly Income	Q122.75		Q80.00		Q65.00		Q44.50	

the upper end of the scale.

Three household heads earned more than the 1980 minimum wage of Q107. per month. Women, as wage earners and household heads, earned considerably less than their male counterparts. One female household head was shown in economic Level C; the remaining three female heads of households appeared in Level D, showing that they not only earned less money, but they and their families experienced lower standards of living also.

Schooling and Economic Level

Because of the generally low level of schooling among Guatemalan Indians, one might expect to find little difference in economic levels and years of school completed. Yet there was some tendency for the economic stratification in the sample to be reflected in level of schooling. Table 10 shows the relationships between years of schooling completed by male and female heads of households, the female spouse of household heads and economic level. Four, or 18 percent, of the household heads in Level A had completed three to six years of formal schooling. Household heads in Levels C and D tended to have less education, with 36 percent having less than three years of schooling. A total of four households heads were analfabetos, or unable to read or write. All of them, however, were able to sign their names. Even the campesino, who had never attended school and had lost his right arm, had taught himself to sign his name using his left hand. Of the 17 female spouses, 23.5 percent in Level A had completed three to six

Table 10

Years of Schooling and Economic Level of

Household Heads and Female Spouses

Years of Schooling Heads of Households[a]	Level A		Level B		Level C		Level D	
	No.	%	No.	%	No.	%	No.	%
Less than 3 years					3	13.6	5	22.7
3-4 years	2	9.1	1	4.5			3	13.6
5-6 years	2	9.1	1	4.5	3	13.6	2	9.1
Female Spouses[b]								
Less than 3 years					3	17.6	5	29.4
3-4 years	1	5.9			1	5.9	1	5.9
5-6 years	3	17.6	1	5.9	1	5.9		
7 years or more			1	5.9				

[a]Based on N = 22 (18 males and 4 females)

[b]Based on N = 17.

years of schooling. One spouse in Level B had six years of school and another in Level B had attended school for a total of ten years. Forty-seven percent of the spouses in Levels C and D had less than three years of schooling. There were five spouses who were unable to read or write. Two of the women who had attended school, two and three years respectively, were unable to sign their names. One of them reported that she had attended a very poor rural school where "nobody learned anything except how to sit still." The other woman explained laughingly that "she had played around a lot."

All heads of households and spouses in Levels A and B possessed some formal schooling. All analfabetos (persons lacking ing the ability to read or write) were in Levels C and D. Education was highly valued by most adult members of the sample especially for their children. Younger adults and teenagers had completed more years of schooling than their parents.

The "most educated" person in the sample was Christina Chajchalac, the 22 year-old daughter of the campesino. She had completed fifteen years of schooling and graduated from secondary school as a maestra (teacher). Neither Señor nor Señora Chajchalac were able to read or write, but they had encouraged their daughter to become a school teacher. Although she had graduated over a year before the time of the study, she had been unable to obtain employment because she had reportedly not received her certificate from the authorities in Guatemala City. She had made numerous trips to the capital to inquire about the delay and was told that she would receive the certificate by mail when it was processed.

There was evidence that members of the sample valued schooling for their children. Residents of San Marcos supported the establishment of a primary school in the colonia. It was completed eight years ago and operates two shifts per day, a morning and an afternoon session. As a general rule, Guatemalan children now have the opportunity to obtain more years of schooling than their parents.

One crude indication of the value of education to sample families would be to compare the years of schooling of household heads and their spouses to young adults ages 15-25 years in the sample population. Male heads of households averaged 3.27 years of schooling. Their spouses and female heads of households averaged 3.38 years of education. All young females, ages 15-25 years (N = 15) averaged 5.93 years of schooling, while their male counterparts (N = 16) averaged 4.68 years of education. Young females averaged approximately one and one-half years more of schooling than either of their parents, while young males averaged slightly more than one year of schooling than their parents.

Interestingly, young women in the sample have more years of education than their male counterparts, 5.93 years compared to the young males' average of 4.68 years. A number of authors who have studied traditional Guatemalan Indian societies have noted that education for girls is not valued because of the traditional role assigned to women (La Fuente, 1967; Paul & Paul, 1952). Adult members of the sample reported that it was even more important for a young woman to have a good education in order to obtain a good job.

They realistically accepted the fact that women will work to contribute to the family's finances. They said, "La vida is muy cara", (life is very expensive.) They believed that men usually could find work that did not require the highly developed skills of reading and writing. Well paying jobs for women demanded the ability to read and write.

Housing and Property Ownership in San Marcos

Most of the property in San Marcos originally belonged to one owner. When he died about 20 years ago, the property was divided into individual lots and sold to the public. People were able to buy the lots for a small down payment and monthly payments of about Q20 per month until the total amount was paid. Most of the residents built their own homes, or hired someone else to build the homes for them. Contributions were solicited from the residents to bring electric lines to the colonia. At the time of data collection, it cost almost Q400 to have water installed, a price that is unrealistic for most residents. In addition, due to the rapid growth of Quetzaltenango, the city was unable to provide utility services to all those persons requesting them. Even with adequate finances, a waiting period of six months to one year before water could be installed was not infrequent.

Fourteen households, or 64 percent of the sample owned their homes and property. Six of these were young households and have been given the home and/or property by maternal or paternal parents.

Six households, or 27 percent were in the process of paying for their homes and land. Only two households, or nine percent, both headed by females, rented their homes. Each rented a one-room house without lights or water, and with a lean-to kitchen. One woman paid Q6 per month and the other paid Q15 for monthly rent. Five families owned a plot of land adjacent to their homes where they grew corn for domestic use.

Population Density Per Room and Economic Level

Population density per room varied according to the size of the house and number of occupants. As can be seen from Table 11, population density per room also varied by economic level.

Table 11 shows that 18 percent of the households in the sample were in Level A and had 2.0 or less population density per room. Levels B and C, containing 36.4 percent of the sample households, had 2.1 to 4.0 persons per room. Level D households or 45.3 percent of the sample residential units had the most widely distributed population density per room. Two families in Level D, or 9 percent of the total sample households had more than 4.1 persons per room. The highest population density per room was 7.0, a household headed by a female who was renting a one-room house with a lean-to kitchen.

Lifestyle and Economic Level

A number of other factors might have influenced the lifestyle and living conditions of households within the *colonia*.

Table 11

Population Density Per Room and Economic Level in the Sample

Population Density Per Room	Level A		Level B		Level C		Level D	
	No.	%	No.	%	No.	%	No.	%
1.0 or below	1	3.0						
1.1 - 2.0	3	13.6					3	13.6
2.1 - 3.0			2	9.1	4	18.2	3	13.6
3.1 - 4.0					2	9.1	2	9.1
4.1 - 5.0							1	4.5
5.1 - 6.0								
6.1 - 7.0							1	4.5

An important factor that should be considered is the number of gainfully employed adults within each residential unit. Table 12 describes the patterns of employment within the sample population.

Table 12 shows that 32 percent of households that occurred in Level D had only one regular wage earner. Nine percent, or two households, in Level C had only one wage earner, while the other four households or 18 percent of the sample that occurred in Level C had more than one person working. Two households in Level B and two in Level A had just one wage earner also. Thirteen households, or 59 percent, occurring across all economic levels, had only one wage earner whose salary was the major contribution to the family's finances.

There seemed to be no particular negative feelings on the part of the men of the sample if their wives or daughters were gainfully employed outside of the home. This tolerant attitude toward employment of females may have been influenced by a number of factors. Indian women have always been involved in the regional market systems in Guatemala. They have been able to take their children with them and thus have circumvented this particular barrier to working outside of the home. It should be noted, however, that a working wife has not affected the male role significantly. Women, whether working or not, were still responsible for all domestic tasks, including the care of children and all household responsibilities. Working outside of the home was something a woman did in addition to her other role-prescribed responsibilities. Younger women had access to factory work or in commercial establishments because of

Table 12

Economic Level and Number of Gainfully Employed

Adults* Per Residential Units

Number of Workers Per Residential Unit	Level A		Level B		Level C		Level D	
	No.	%	No.	%	No.	%	No.	%
0							1	4.5
1	2	9.1	2	9.1	2	9.1	7	32.0
2	1	4.5			2	9.1	1	4.5
3-4	1	4.5					1	4.5
5-6					1	4.5		
7 or more					1	4.5		

*This definition does not include those women who make and sell articles of clothing or foodstuffs on an irregular basis. It includes those persons who receive a designated salary and have regular working hours. It also includes those women who regularly perform daily work but may receive variable wages.

their higher level of education. They earned a higher salary and were able to leave their children with their mothers or other kin for a small remuneration which was paid from their earnings.

Most women in the colonia indicated that they enjoyed the opportunity to work outside the home. In a society that still restricts the role of women by limiting their mobility outside the household, a job provided a socially approved reason for women to leave the home. In addition, women said that they wanted to have money of their own and not be dependent upon their husbands.

Another factor that appeared to have some effect on economic status and lifestyle was excessive alcohol consumption on the part of males. It certainly had social and personal consequences on the lives of the families in the colonia. Alcohol abuse is a very difficult behavior to evaluate objectively. According to close informants, usually wives, sisters, and sometimes mothers, of the total 22 families in the sample population, 14 (or 64 percent) reported a family member (always male) who frequently drank excessively, becoming abusive or threatening with his spouse. The informants all stated that excessive consumption of alcohol was always an unexpected drain on family finances.

Of the four female heads of households, one reported drinking problems with a son. Two other female heads of households reported they had left their husbands because of drinking, abusive behavior, and non-support. These two women were still occasionally subjected to threats and violence from their estranged spouses. Neither of them received any financial assistance for themselves or their

children from the estranged spouses. The remaining female head of household, a widow, reported abuse and threats from her granddaughter's boyfriend, who occasionally visited the home while under the influence of alcohol and demanded money from his girlfriend. One male head of household was a reformed alcoholic who has experienced sobriety for six years. He was very active in a local group of Alcoholics Anonymous. Although there were many problems associated with excessive drinking, some of which are discussed subsequently, the financial drain on the families was considerable. Men frequently drank excessively over a number of days, neither returning home at night nor participating in work obligations. A number of them lost jobs; even if they managed to return to work, a week or more with no earned income could be devastating to the marginally economic households in San Marcos. It was during these times that the woman's ability as a part-time wage earner was crucial for the support of the family. A few dollars earned from the sale of eggs, tortillas, or an embroidered blouse would enable the family to survive the week or more when the major provider was not working. Support networks of kin and friends who were able to provide food or money were also important.

Excessive alcohol consumption was not mutually exclusive to any of the economic levels. Informants within each of the 18 households headed by males were asked to rate the drinking behavior of the male head of household. Household members of households headed by women were asked about the drinking behavior of eldest son, estranged spouses or others, in that order. Problems with drinking

Table 13

Alcohol Consumption of Current Household Members and Significant Others According to Family Informants[a,b]

Amount of Consumption	Level A	Level B	Level C	Level D	Total
Zero to Moderate	4.5	4.5	9.0	27.3	45.3
Excessive	13.6	4.5	18.3	18.3	54.7

[a]Causing loss of wages two or more days per month.

[b]Expressed as percentages.

were found in all levels, as seen in Table 13. The difference between households with a family member who indulged in excessive drinking and those without seemed to be related to the religious status of the household. All excessive drinkers, with one exception, were from Catholic households. Only one Protestant family in the sample reported problems with excessive drinking. The fundamentalist Protestant sects in Guatemala forbid the use of alcohol and there was considerable peer pressure within each church group to abstain from the use of alcohol.

Evaluation of Economic Data

Summarizing the tables displayed earlier, it may be concluded that the economic level or standard of living was related to the following factors:

Income. Most incomes in economic Level A exceeded 100 quetzales per month, whereas most incomes in Level D were below 60 quetzales per month.

Occupation. Occupations that were associated with relative job security and income stability were found in Level A. Occupations without job security or income stability and thus with lower salaries were found in Levels C and D.

Education. Heads of households with relatively more years of education were found in Levels A and B. Those with less formal education were in Levels C and D.

Housing and Material Belongings. Most households in Level D were found in homes without water; a few had no electricity. Their

belongings consisted mainly of beds, chairs, transistor radios, and television sets. Families with living and dining room furniture, stoves and electrical appliances were found in Levels B and A. Economic levels were also reflected in population density per room with lower densities in Level A increasing through Levels B and C, with families in Level D experiencing the highest population density per room.

Nineteen of the 22 heads of households earned less than the monthly equivalent of a legal wage and occupied one of the following occupational categories: a) street or market vendors; b) unskilled workers in construction, production, or service jobs; c) skilled free-lance workers, and d) self-employed commerce workers. Households headed by women were in the lower economic levels; the women household heads experienced more job insecurity which was reflected in their family's standard of living. The economics of the sample may be described as featuring both low income and low job security. The most relevant factor appeared to be economic insecurity, not knowing from one day to the next if work will be available.

There were four different economic levels within the sample. The economic levels, defined by the variables of housing, furniture and appliances, were self-consistent and were related to other economic and cultural indicators in the population. Economic differences were found in the lifestyle of the poor. This indicated that even within a sample of low income people, economic stratification was reflected in terms of education, income, occupation,

and material belongings. The presence of the economic levels demonstrated that the poor households were not necessarily a homogeneous group nor did they all live in similar circumstances. The highest economic levels included those persons who had job security, regardless of whether the source of income was obtained from an industrial wage or from skilled free-lance labor.

Family Life and Household Compositions

In this section the social organization of the colonia from the standpoint of kinship is discussed. Traditional institutions, such as kinship relations, have not been weakened by urbanization or the economic instability of the residents. Indeed, the analysis indicates the opposite has occurred; kinship bonds formed the basis for the adaptive mechanisms which have developed to ensure health and wellness of individuals.

Marital Roles

Marital roles in many Latin societies have a strict separation that go beyond a male-female division of labor to encompass leisure, friendship, and the domains of the affections (Lomnitz, 1979). Nash (1958) has described the relationships between husband and wife in the traditional Indian society of Cantel as subordinate-ordinate roles, with the male being in the dominate position and the center of authority. Nash states, "There is never an open display of affection between husband and wife. . .gestures of endearment are absent in daily life" (pp. 57-58). According to Nash,

the husband showed his affection by carrying out his prescribed role as bread-winner and doing minor repairs around the home. The woman demonstrated her attachment to her husband and family by attending to her household duties.

In the colonia, there was a strict division of labor between husband and wife in all families in the sample. Husbands were expected to work outside of the home and to provide the money for household expenses, such as food, clothing and furniture. Women were expected to assume responsibilities for all domestic chores. Many women, of course, worked outside of the home, but husbands felt no obligation to assist with domestic chores; a few of the younger men would assume responsibility for the children for a few hours while their wives were working or at the market. Many men said very emphatically that cooking, washing clothes, and dishes was "women's work" and they would never do it. There seemed to be considerable peer pressure among men that reinforced this behavior. A man who washed clothes or dishes or otherwise assisted his wife with such tasks would be ridiculed as being "less than a man."

There appeared to be a low emotional content in the husband-wife relationship. Many men transferred their emotional attachments to their male friends, while women directed their affective lives to their children. As a general rule, the bonding between mothers and sons appeared stronger than between mother and daughter.

The women accepted a role that was characterized by a great deal of tolerance and patience. It can be seen early in the

behavior of little girls who waited on their little brothers, or who were ordered about by them and who expected no attention or affection in return. Women grew up taking care of men, waiting on their needs and occasionally submitting to ill treatment, callousness, and neglect with a stoic patience. When speaking of men's behavior such as drinking, refusing to provide money for their famlies, or spending all of their free time with their male friends or other women, the women said with resignation, "That's the way it is. It is always the women and children who suffer, not the men." Women talked frequently among themselves about men's irresponsibility and offered each other considerable support and encouragement. But it was done with acceptance and without the thought that women could exert real control or change the situation. For example, Juana, a young mother who was pregnant with her second child, complained that Paco, her husband, frequently had violent outbursts of temper and beat her. Juana's neighbor, Maria Luisa, said, "Yes, men are like that sometimes. Have patience, maybe he'll change after the baby comes."

The most common marital role was one of male dominance, occasioned by such behavior as wife abuse, excessive drinking, and failure to provide money for household expenses. Obviously, not all men drank excessively, but a large portion of them did. Regardless of drinking behavior, men were the dominant partner in the marriage and the woman's role was viewed as subordinate. Women in the colonia tended to develop resilient personalities and learned to become resourceful through enduring situations. Women did

endure and survive some rather difficult times, but they did not necessarily remain isolated or passive. Men's drinking and abusive behavior was discussed openly, with no attempt to hide, excuse, or cover up the drinker's behavior. This was done with great ridicule with other family members, women, friends, and with children who quickly learned to mimic the adults' attitudes and behaviors. One day the investigator was walking towards the colonia with two young children, a boy and girl, ages seven and eight years. The little girl pointed out a local cantina (bar) and said, "See, that is where Daddy goes to drink before he comes home at night." Then, she began to imitate a drunk trying to maintain his balance. Their mother had done this many times when describing her husband's arrival late at night. Often, women berated their husbands publicly and forcefully for their excessive drinking behavior.

It was believed by the women in the colonia that the "best" marriages were those where the husband did not drink. These marriages were described as "tranquil" and "happy." The "worst" marriages were those (in order to descending importance) in which the husband: a) did not give his wife money for food and household expenses; b) had other women; and c) drank frequently and was abusive. The unfortunate woman who had a husband with all of these qualities was greatly pitied by her kin and neighbors and it was said that she had "bad luck." It should be noted that for these economically marginal women, financial security was the most important element in a marriage. As long as the husband supported the family, almost any behavior, would be tolerated.

Many women, particularly the Protestant women in the colonia, did not drink. Others may have a glass of wine or a drink to celebrate a special occasion. The investigator spent a great deal of time with the women, including holidays, fiestas, and other special occasions, and was aware of only one occasion when a woman from the colonia overindulged in alcoholic beverages.

Gossip and envy were used as effective means of social control. Often, it was said of young single women, particularly those who held good jobs or attended the university, that "They are always in the streets with the men," or "She likes the men." This always was stated in a manner that implied social disapproval. Women "should not" enjoy themselves with men other than husbands or kin. The researcher was not aware of any married woman who participated in extramarital affairs. On the other hand, the colonia gossip indicated a number of men in the sample and in the larger population "had other women."

Traditional attitudes, probably a combination of the view of women's roles and machismo, along with excessive drinking behavior on the part of males, influenced the marital roles. Attitudes were changing and this was seen in a number of the young nuclear families, especially in the young couples that lived apart from their kin and therefore had more opportunity to assume different behaviors without family censure. Even men with drinking problems did not cause disruption in their families all of the time. When not drinking, many of them expressed regret and sorrow for their behavior. The younger ones, when experiencing sobriety, seemingly

redoubled their efforts to be better spouses and fathers.

Women had few alternatives other than staying with their husbands. Because they lacked economic skills, they believed that life was much easier with a husband who gave them money most of the time than life as a single woman trying to support a family. Divorce in Guatemala, while not impossible, still has social stigma attached to it and was a difficult process involving considerable time and effort. Women understood that it was unlikely that a divorced spouse would pay either alimony or child support. Women realistically valued economic security above all other factors. A husband could have other women and be abusive; the wife certainly may not like the situation, but it was tolerable as long as he continued to give money to the family most of the time. It was only when the man drank so excessively that he lost his job and was unable to contribute financially to his family that a woman would seriously consider leaving him or insisting that he move out of the home. As an option, divorce was not considered. Both men and women said that a divorced woman could never remarry because "No man would have her." However, a divorced man could remarry without any social stigma attached to his divorced status. Since a woman's consent was necessary prior to a divorce, women said that they would never consent if their husbands wanted divorces. A woman would never be able to remarry anyway, so why allow the husband freedom to marry again? A woman who was separated from her husband could live with another man, and many of them chose to do so because economically they were unable to support themselves or their

children.

Men occasionally left their families, lived with other women and fathered other children. Although a number of factors were involved, excessive drinking behavior was often one of the variables associated with the separation when it occurred, especially if it was accompanied by lack of economic support from the husband.

A number of young women (six in the sample) have had children out of wedlock. Out-of-wedlock children may be "acknowledged" by the father in that they assume his name, or not acknowledged, and therefore use their mother's name. Such children usually lived with the mother and her family. If she married, they could remain with the grandparents or live with the mother. Residents of the colonia reported that step-children are not always readily accepted by the step-father. They believed that men preferred women who have not been married and who have not had children by another man.

Not all marriages in the sample were formalized by legal sanction. Paul and Paul (in Tax, 1952) reported that although civil marriage was required by federal law, it was lightly regarded locally and often overlooked. In the more rural areas of Guatemala, it was common for a young couple to live together for several years and to have a number of children before formalizing the marriage by civil or church proceedings.

Of the 17 married heads of households who lived with their spouses in the sample, eight heads of households and spouses, or 47.1 percent were legally married; nine heads of households, or

52.9 percent had not been married under legal auspices. The couples who were not legally married were of all ages--some in their fifties, while others were relatively young couples.

Residence of young couples was primarily patrilocal as demonstrated by the inclusion of six daughters-in-law in the eleven extended families of the sample population, as compared to only two sons-in-law. This seemed to be the predominate pattern in the colonia. Informants said that living with the parents of the groom was the preferred pattern of residence for a young couple prior to the establishment of their own home, but in reality the couple usually lived with the household that had the space to accomodate them.

To conclude the discussion of conjugal roles in the colonia, it can be said that they are best understood in terms of social institutions, the cultural context and the economy of a marginally poor population. Women were economically dependent upon male breadwinners; there was a division of labor within the home that reflected the prescribed traditional roles, yet urbanization and the increasing marginalization of the urban poor has forced many women into the work force outside of the home. Marital relationships often experienced stress from excessive consumption of alcoholic beverages, lack of financial support and abusive behavior on the part of men.

The Nuclear Family

The nuclear family in San Marcos should be carefully

distinguished from the household. Most households in the colonia contained an extended family, a social group that was intergenerational and contained two or more mutually related nuclear families.

The sample contained eleven nuclear families living as individual households of parents and children, plus eleven extended families living as households of 2.4 nuclear families on the average. The individual nuclear families were complete, consisting of fathers, mothers, and offspring. Extended families consisted of various combinations of unmarried sons or daughters, married offspring and families, unmarried daughters with children, as well as aunts, grandparents, and other kin.

Within the sample there was a bias toward young complete nuclear families. Young nuclear families, while not uncommon in the colonia, did not occur as frequently in the composition of the population as they did in the sample. This is believed to be because young couples felt they would have adequate time for participation in the research project, as well as the fact that younger people may be more inclined to volunteer for experiences that the older generation would not want either because of fear of the situation or lack of interest.

Table 14 shows the ages of heads of households in nuclear and extended households in the sample, with 11 (or 50 percent) of the households in each category.

The Household

The household has been traditionally defined as the social

Table 14

Ages of Heads of Households in Sample Population

Years of Age	Nuclear	Extended
21-30 years	3	
31-40 years	5	1
41-50 years	1	4
51-60 years	1	4
61 years or more	1	2

group of all individuals who share the same residence and who also share the same entrance or access to a residential unit (Lomnitz, 1979). Lomnitz found that this definition was adequate in rural areas where adequate living space was not a problem. However, when the household was transferred to an urban setting where space was no longer available for traditional patterns of residence, other types of living arrangements developed that were adaptive to the lack of space and the economic restraints of the society.

Lomnitz (1979) distinguished three variables which were utilized in the classification of households in this sample. They are kinship, residential proximity and domestic function. Lomnitz has stated "each society may have a characteristic combination of these variables; hence the concept of a household may acquire different connotations and meanings depending on the social context" (p. 99).

In San Marcos, households comprised one or more kinship-related nuclear families. A nuclear family consisted of a man and woman and their children. The nuclear families were complete or incomplete, lacking one of the spouses or young children. An extended household was defined as two or more mutually related nuclear families as well as other kin.

The household lived either in a single residential unit or in several adjoining units. The most common custom in the colonia was to share the same entrance way but some households had a number of separate entrances. They could share certain domestic tasks and not others, depending on the preference of the individual families

involved. Lomnitz noted (1979) that the spectrum of domestic tasks may be quite broad and included preparation and consumption of meals, domestic tasks, child care, leisure activities, and a wide variety of tasks including various forms of mutual cooperation.

Thus, in the colonia, a set of rooms with a single entrance might contain several nuclear families. The families within were always related by kinship and may or may not share a patio, a kitchen, or various other rooms within the residence. The different extended households that are described resulted from the interaction of the three variables of kinship, residential proximity, and domestic function.

Types of Households

The criteria proposed by Lomnitz to classify households are relevant for describing household formations in dense urban populations who live under economically marginal conditions. The three variables of kinship, residence and domestic function were used to classify the households in the sample. Two types of households described by Lomnitz in her study of a Mexican shantytown did not occur in San Marcos.

The following classification of types of households is proposed for San Marcos:

1. Kinship. The household may be either nuclear or extended. A nuclear household contains a single nuclear family, and an extended household contains an extended family.

2. Residence. The household may be one of three types:

a) Shared-residence; b) Divided-residence, or c) Joined-residence. The shared-residence household equally shares all areas of the residential unit. In the divided-residence, the household lives in one residential unit which is further subdivided into separate areas used by nuclear families within the household. The joined-residence is divided into separate dwellings and plots forming adjoining, but separate, residential units.

3. Domestic function. This area can be very broad and vary considerably from one household to another. It is defined here as expense sharing or contribution of money from each nuclear family to purchase food. When food is purchased jointly in this manner, the food preparation is usually the responsibility of only one woman, but all members of the participating nuclear families share in the consumption of the meal.

The most common type of social structure in the colonia was represented by the shared-residence type household. This household featured the sharing of domestic duties and household expenses among the components of nuclear families that resided in the household. The divided-residence household did not share expenses for food. Each nuclear family purchased, prepared, and consumed food separately. They also could share other selected household expenses, such as utilities. In the joined-residence type household, each family lead a separate domestic and economic life, although there could be considerable reciprocal exchange over a wide variety of domestic and economic functions.

Table 15 shows the pattern of household arrangements with type

Table 15

Types of Households by Residential Pattern and Domestic Function*

Types of Households	Number	Percentage
Nuclear	11	50.0
Extended		
Shared Residence		
With expense sharing	7	32.0
Without expense sharing	1	4.5
Divided Residence		
With expense sharing	1	4.5
Without expense sharing	1	4.5
Joined Residence	1	4.5

*In the sample of 22 households.

of residence and domestic function in the sample. As can be seen from Table 15, the shared-residence type of household with expense sharing was the most common extended household arrangement in the sample. It seemed evident that this is the household pattern most economically feasible. The shared-residence household shared all portions of the small living quarters and pooled their economic resources for all household expenses. The families that occurred in the two divided-residence households had more living space and household members held relatively stable jobs. These two factors allowed residents the option for a different living pattern. The one joined-household in the sample was one of the first families to move into the colonia nineteen years ago. The parents had been able to purchase land relatively cheaply and when their two children married, they were able to give them a small plot of land and assisted in building additional rooms. All of the men in this family had stable jobs and the women made substantial economic contributions to the household budgets.

On the whole, living arrangements in the colonia seemed relatively fluid. Newly married couples tended to live with the husband's family and adopt a shared-residence with expense sharing mode of household arrangement. Eventually, they might adopt a divided-residence without expense sharing. If they were financially able, they may opt for a nuclear household or the joined-residence. This process of change in household types without necessarily implying a change in residence represented an important feature of the social structure in San Marcos and reflected

a method of adaptation to the economic realities of life.

The following case histories were selected as typical for each of the types of households.

Case Histories Representing Examples of Types of Households

Nuclear Family Household. (See Figure 3) Carmelino Garcia, age 34 years, lives with his wife, Maria Christina, and his eight year old daughter, Consuelo. They have a one-room house on the northern hills of San Marcos. Maria Christina's parents moved from the Capital to Quetzaltenango 23 years ago and purchased land in San Marcos when it became available. As their children married, they were given a small plot of land and helped to build a home. Maria Christina's brother lives just across the path from the Garcias; her sister lives in the next house further up the hill; the parent's home is located at the top of the hilly ravine. For the first years of their marriage, Carmelino and Maria Christina lived with her parents; they have lived in their own home for four years.

Their home is small; it contains two double beds, a stove, a cupboard, dining room furniture, a television and sewing machine. The patio is not enclosed; it contains a pila and privy. They have a large aggressive dog which is chained near their door and turned loose at night to protect their premises.

Carmelino is a self-employed shoemaker. He has a regular clientele and also takes orders from several shoe shops in the city. He works at home in a corner of the room with a neighbor boy who is his apprentice. Often Maria Christina and Conseulo help with the sanding and polishing of the shoes. Maria Christina also makes modern-style skirts which her brother-in-law sells in a small store in the market. Their economic level is rated B. Carmelino averages about Q35. per month in net nearnings. Yolanda's sewing brings in another Q10-15 each month.

This household functions separately and independently of others; however, it participates in a network of mutual help with Maria Christina's kin. All of her family share a plot of land on which they raise vegetables and corn. The Garcia's are Protestant and active participants at the colonia church. Carmelino has an excellent singing voice

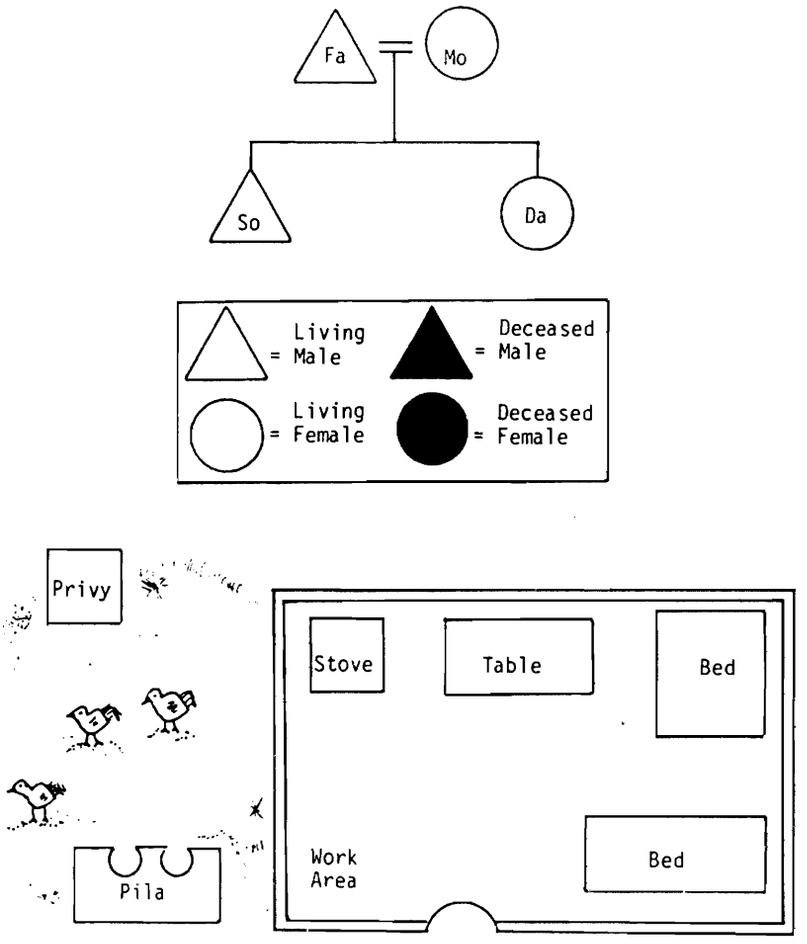


Figure 3. Nuclear family household.

and he and a group of other church members travel to other churches in various towns for church sponsored programs. His wife and daughter usually accompany him. Their social life revolves around their church activities; for the most part, their friendship ties outside of kin are with other church members.

Extended Household: Shared-Residence with Expense Sharing. (See Figure 4). The Cotom family is an extended family built around a widowed father, his mother and sisters, and his offspring. They live in a residential unit containing five rooms including a kitchen. The extended family contains components of three incomplete nuclear families and one complete nuclear family. The head of household, Don Carlos, is 58 years old. His wife died three years ago. His 92 year-old mother, his widowed sister, his never-married sister, as well as his 20 year-old son are members of this household. His daughter, Edna, her husband Raphael, and their seven month old baby complete the family.

This extended family has an expense-sharing arrangement which comprises all domestic expenses. Each working member contributes a fixed amount each month for household expenses; light (Q 3 per month), food (Q15 per month), etc. The two older sisters of Don Carlos do all of the marketing and food preparation. The women usually eat when they are cooking and they see to it that their mother has food. Everyone else eats when they are hungry or when they have time. Meals are almost never taken together. Edna does the washing for her family; the two sisters do all other laundry. The baby and mother are looked after by all members of the family.

The two sisters make tortillas in the home during the morning, and look after their mother and the baby. In the afternoons and evenings they sell their foodstuffs in the streets. Don Carlos works whenever he can as a construction worker. He is often unable to find steady employment, so he occasionally tends the baby in the afternoons. The baby's father, Raphael, works as a bus driver's helper and his working hours are irregular. He, too, often assists with the care of the baby. His wife, Edna, works as a seamstress in a local clothing factory. The youngest adult member of the household, Don Carlos' son, is a dental assistant. He and Raphael have become close friends and they spend their free afternoons tending the baby so Don Carlos can look for work and the weekends visiting and drinking with friends.

The total income of this extended family is rather small, usually around Q275 per month. Their economic level is

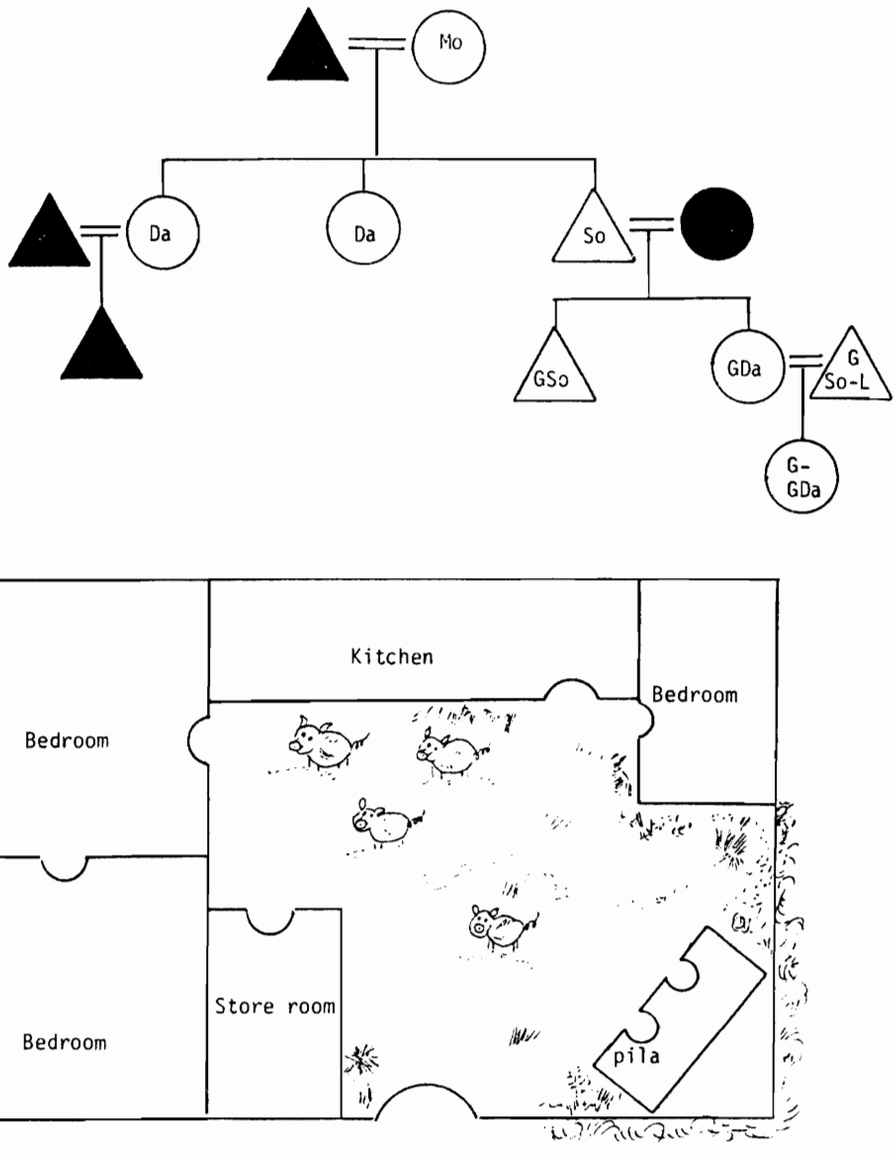


Figure 4. Extended household: Shared residence with expense sharing.

rated D; they own a television set and everyone contributes to the monthly payments.

This type of residential pattern is ideal for absorbing various kinds of kin, such as the aged mother, and the two elder sisters of Don Carlos. It is helpful for Don Carlos also, because men seldom live without women in this society. Everyone in the household shares responsibility for the aged mother and the baby. The two young men, Raphael and Marco, usually can be found together. In fact, Raphael spends his free time with his brother-in-law rather than his wife.

An Extended Household, Divided-Residence Type without Expense Sharing (See Figure 5). Ramon, his wife, Amelia, and their three preschool boys live with his parents in a three-room home with a lean-to kitchen. The older couple have a room to themselves; Ramon and his family share a room and the third room is used as a storeroom. This extended family have a clothing business in the market. Each morning, Ramon and his father leave for the market. Amelia prepares breakfast for the children and then does the household chores which always includes washing clothes and preparation of the mid-day meal. At noon, she and the boys, carrying their dinner, leave for the market. The family eat in their little clothing stall. Ramon's father goes home for his meal and usually does not return to the market as he is semi-retired. In the afternoon, both Amelia and Ramon are occupied in the market; if she has any free time, she embroiders blouses which will later be sold in the store. The two older boys sell matches, pencils, and other miscellaneous small items in the aisles of the market. The family leaves the market together around 6:30 p.m., Amelia carries the luncheon dishes and food for the next day, while Ramon carries the youngest child. At home, Amelia prepares a light snack, usually bread or tamales, and coffee. Although she shares the kitchen facilities with her mother-in-law, the two women engage in separate meal preparation except on special occasions. The family carry their plates to their room and watch television while eating. The room contains three double beds and two wooden chairs. They sit on the beds while eating their meal and enjoying television. On Sundays, Amelia stays at home catching up on the domestic chores. Often, Ramon, his father, and the oldest child will take clothing to another town to sell in the Sunday market. The two women may share a meal together, but this is rare. Expense sharing is, to some extent, determined by economics, but social relations between women in the household are also important factors. The present case suggests that the unfriendly relations between mother-in-law and daughter-in-law exclude the possibility of expense sharing. The economic level of this

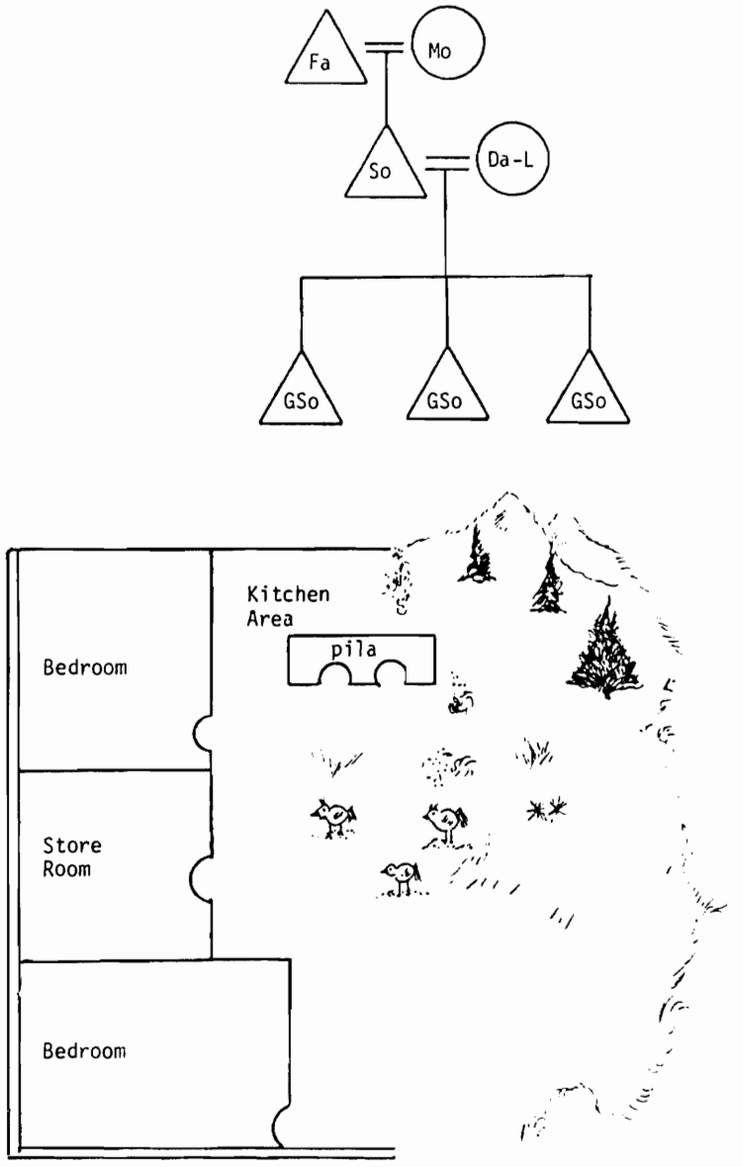


Figure 5. Extended household, divided-residence type without expense sharing.

family is level D.

Extended Household, Joined-Type with no Expense Sharing. The Lopez family group includes three nuclear families (one is incomplete), living in adjoining rooms that have private entrances (See Figure 6). The unifying element is kinship; a brother and sister with their respective families and their parents. This family arrived early in the history of the colonia and, as the children married, the parents were able to help them establish a home. Another son, with his wife and family, lives in the colonia as a nuclear family. Within the extended household, each family lives in its own residential unit and maintains its own economy. The men all work at reasonably stable jobs; all of the women (the mother, daughter, and two daughters-in law) have a food service at the market. Each family is responsible for their portion of the property; they each have separate washing facilities, patios, and privies. All residential areas have both lights and water. The household is rated at economic Level A. There is a continual exchange of mutual assistance, money, loans of tools, clothing, child care and leisure activities.

Señora Lopez says her daughter, Luisa, had "bad luck" when she married her husband, Raul. Raul has had a problem with alcohol abuse since he and Luisa were married 12 years ago. This has become a source of contention, not only between Raul and Luisa, but between Raul and Luisa's family. Raul's drinking has increased this past year; Luisa's parents and brothers have urged her to leave him, promising they would help her with finances and the education of her two children. Raul has missed several weeks of work because of excessive drinking. The owner of the factory where he works happens to be the godfather of his and Luisa's marriage. The godfather has told Luisa that he is reluctant to fire Raul because he knows the hardship it will bring to his family, but that more drinking-related absences will not be tolerated. When Raul is drinking, Luisa and her children spend the night with her parents to avoid his abusive behavior. In this way, the extended family serves as a protective device, as well as a source of financial assistance in times of need.

Luisa is very active in the Protestant church. She attends meetings two or three times weekly during the evenings. Church meetings are one of the few places where a woman can go without her husband and not be subjected to the criticism of her neighbors.

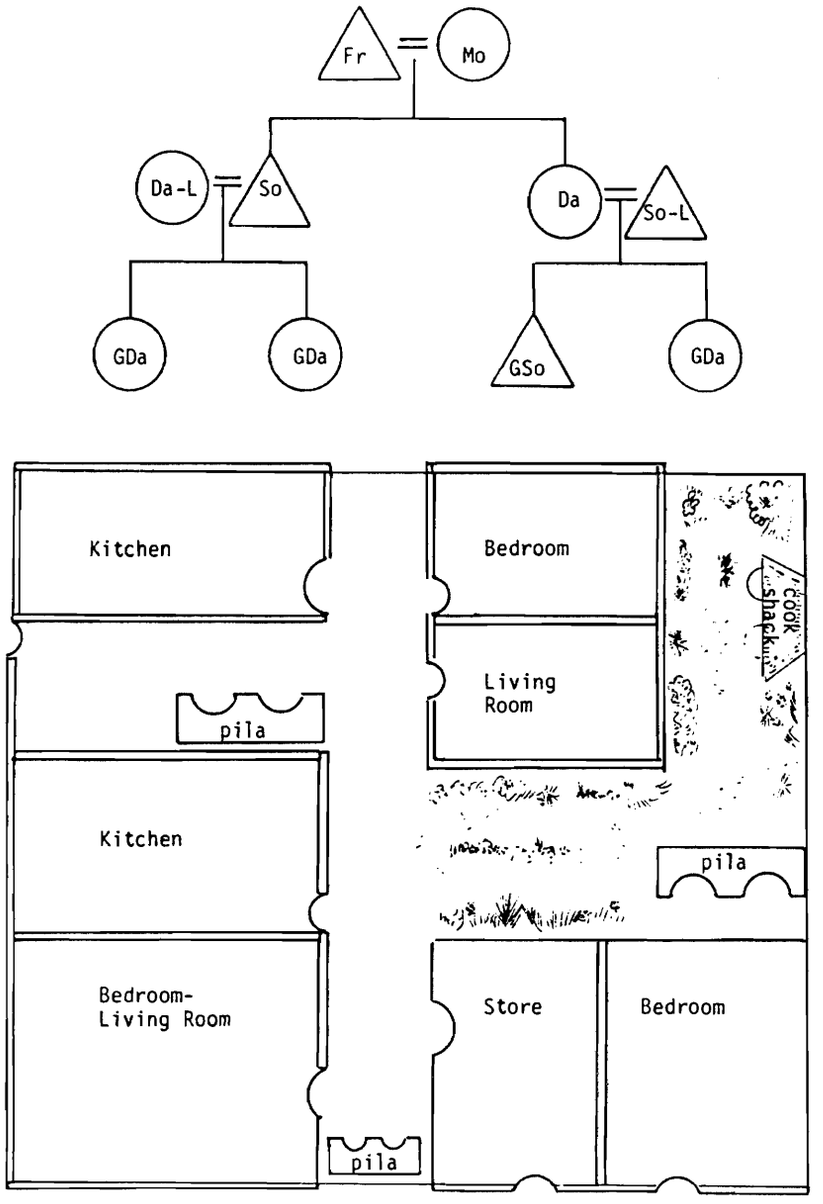


Figure 6. Extended household, joined-type with no expense sharing.

Kinship Relations Within the Colonia

In San Marcos, as in many areas of Guatemala, the kinship system is bilateral. The descendants inherited the family names of both father and mother, though the father's name was used first. The community identified an individual as a member of both families that appear in his or her name.

Contact among kin was related to spatial proximity and to closeness of kinship. As a rule, relatives who lived in the colonia saw each other every day. Relatives in other parts of the city were seen once or twice each week. The frequency of personal contact between kin who lived within walking distance of each other was an important social phenomena; regular visiting between kin groups was common. All households in the sample reported that they had kin in the colonia or in other areas of Quetzaltenango and that they visited with them often. The kin most frequently mentioned were parents, brothers, sisters, aunts and uncles. A total of ten households in the sample reported kin living within the colonia. They too reported frequent visiting, mutual cooperation, and friendship with the kin residing near them.

Fictive Kinship

The traditional institution of compadrazgo (fictive kinship) can still be identified in San Marcos. The institution of compadrazgo in Latin America has often been cited as allowing individuals to form relationships with others who are socially or economically significant (Mintz & Wolf, 1967).

People in the colonia did seek godparents for their children, but the relationships between the co-parents did not necessarily form a basis for any continuing interaction. Most residents reported that as a system, compadrazgo was not important anymore. Some people had not seen their compadres (co-parents) in years and others, in some cases, could not remember their names. Others had close ties with both co-parents of their children and their own godparents, but this sometimes was seen as a part of the normal relationships between friends. An example was mentioned previously in the case history of the Lopez family. Raul was able to continue working in spite of repeated absences due to excessive drinking behavior because his employer was the padrino (godfather) of his and Luisa's marriage. Roberts (1973) also found that compadrazgo was not a significant social relationship in his study of shantytowns in Guatemala City. He suggested that the instability of urban life in Guatemala has contributed to the breakdown of godparenthood as relationships made when a child is born are likely to be disrupted by changes in residence and occupation.

Summary and Conclusions

Summarizing the economic data presented earlier in this chapter, it can be concluded that the economic levels within the sample were related to income, occupation, education, housing, and material belongings. Those heads of households in the economic Levels A and B tended to earn higher incomes and were in occupations that reflected both job security and income stability. As a rule, these

heads of households had relatively more years of education, their homes had water and electricity and their families enjoyed a higher standard of living than those households found in Levels C and D.

The data show that other factors in family lifestyles also influenced the standard of living of the households in the colonia. As the number of gainfully employed adults within the household increased, the standard of living tended to improve also. The data has shown that frequently women were employed outside of the home. Women tended to be employed in occupations requiring domestic skills. While their salaries were marginal, money contributed to the household finances was often decisive in terms of survival of the family.

Excessive consumption of alcoholic beverages by males in the sample influenced both family lifestyles and economic situations. Although alcohol abuse is difficult to evalute in an objective manner, the data available indicated that it precipitated numerous family crises such as loss of employment and thereby loss of income, spouse abuse, fighting and other alcohol-related events that had serious consequences on the households involved.

Marital roles in the sample reflected a strict division of labor based on sexual roles, with the female being in the subordinate position. Women realistically valued the economic security of marriage as they perceived few viable alternatives. Approximately 50 percent of the marriages of heads of households in the sample had been formalized by legal sanction. Conjugal relationships were characterized by rather brittle relationships with

the women directing their emotional attachments to their own kin and children, while men formed close friendship ties with other men.

Within the colonia households comprised one or more kinship related families. Households in the sample were classified according to the variables of kinship, residence and domestic function. The sample contained 22 households with 11 single nuclear families and 11 extended families. The most common extended family living pattern in the sample and in the colonia at large was the shared-residence type of household with expense sharing. It was shown that this household pattern had economic feasibility in that persons within the household shared all portions of small living quarters and pooled economic resources for household expenses. It was suggested that living arrangements in the sample reflected methods of adaptation to marginal economic conditions.

Close contact with numerous kin was a common practice of the sample members. Contact with kin was related to spatial proximity and to closeness of kinship. All households in the sample reported the presence of nearby kin either living within the colonia or in other portions of the city. Fictive kinship was identified within the sample. The importance of compadrazgo as a social institution was declining but close ties between fictive kin were reported by some members of the sample.

CHAPTER V

ANALYSIS OF THE STRUCTURE OF ILLNESS

BELIEFS AND EXPERIENCES

The data regarding illness beliefs and experiences that are presented in this chapter should be viewed within the context of what constitutes a typical occurrence of illness in the colonia. Data about this issue come from two sources. First, members of the sample households were asked to describe their health beliefs and practices as related to 13 common illness manifestations. These data yielded a set of beliefs regarding causation, treatment, and prevention of the illness conditions. The data provided a culturally relative body of knowledge that was used in explaining the occurrence of illness and in evaluating the potential consequences.

Secondly, health histories were obtained for each member of the sample which provided a general description of reported morbidity patterns in the population. Data were solicited concerning specific preventive health behavior (immunization status), perceived health status, and common traditional diseases.

Examination of the features used in distinguishing causation, treatment, and prevention yields insights into the general categorization system which viewed in conjunction with morbidity data

suggest some of the links between what people in the colonia believe to be true of illness and what they reportedly do in response to it. In addition, the data allowed examination of attitudes, beliefs and experiences of past interactions with health care systems.

Reported Health Beliefs and Practices

Informants 18 years of age and older were asked to respond to the Health Beliefs and Practices Interview Schedule. Interviews were obtained from 70 of the 72 persons in the sample age 18 years and older. The schedule listed common illness manifestations and informants were asked to describe causation, treatment and preventive practices for each illness manifestation. Illness manifestations were defined as those altered bodily states or processes that occur during sickness or ill health. Ten illness manifestations had been identified by the pre-test sample as being the most "common" and "frequent" manifestations of illnesses which they had experienced. Three categories of illness manifestations (crying, sadness and chest pain) were added by the investigator. The informants in the pretest sample agreed these categories occurred during illness experiences.

Table 16 shows the illness manifestations and ascribed causation of each manifestation. Causation was divided into two categories by the investigator. External ascription included causes which were related to the environment and to events that were external to the individual. Internal ascription were those factors

Table 16

Illness Manifestations and Ascribed Causation[a]

Illness Manifestations	External Ascribed Cause	Internal Ascribed Cause
Headache	Heat Cold Changes in the climate	Other sickness, such as colds, flu, upset stomachs, eye strain, pregnancy, fever Intense emotions, such as anger, anxiety, worry, thinking, sadness or depression, nervousness. Individual behavior such as being sleepy, tired, working too hard, drinking too much Being warmed and then getting chilled
Crying	Death of a family member or friend Bad news Changing place of residence Being away from family A moving experience Problems at home Spanking a child	An illness, pain Strong emotion, such as anger, grief, happiness, joy, surprise, regret, desperation
Sadness	Death in the family or of a friend Family living far away Problems at home Drinking behavior and abuse from spouse Financial problems Farewells	Strong feelings of grief, depression, regret, feelings of being alone, helpless, or abandoned

Table 16 Continued

Illness Manifestations	External Ascribed Cause	Internal Ascribed Cause
Weakness	Lack of money (unable to buy food)	Lack of vitamins and proper food No appetite Sickness or disease Working too hard Drinking too much Worry, preoccupation Illness such as stomach problems, flu.
Chest pain	Cold Heat Dust Aires (airs) Fuerzos (forces) Rain	Illnesses such as colds, flu, cough bronchitis Drinking cold liquids Over indulgence in exercise, work, lifting, running Change in body temperature from hot to cold. . .such as when being hot drinking cold liquids Not taking care of yourself properly, especially when you are ill Getting wet Bathing when you have a cold Folk illnesses such as cólera, susto Development of rapid growth in children Your heart
Vomiting		Eating "bad" food or spoiled food Upset stomach

Table 16 Continued

Illness Manifestations	External Ascribed Cause	Internal Ascribed Cause
Vomiting cont.		Poor digestion Delaying a meal and then eating quickly and eating too much Pregnancy Drinking too much Illnesses such as stomach infections, parasites Car sickness
Cough	Dust Cold Cold air in lungs Changing climate Rain	Having a cold, flu Drinking cold water or other cold liquids A lung disease Not taking proper care of a cold Being warm, then eating or drinking something cold Behaviors such as smoking in excess
Lack of Appetite		Illnesses such as upset stomach, vomiting, fever, stomach pain, bilis, empacho Preoccupation, worry about family or work Certain emotions such as anger "Passing" the time when one should eat. Eating too much
Colds	Rains, getting wet Warm then cold Cold Aires	Not taking care of yourself such as taking a bath and getting chilled

Table 16 Continued

Illness Manifestations	External Ascribed Cause	Internal Ascribed Cause
		Going out at night when it is cold Drinking cold liquids Not wearing a sweater when its cold Getting up at night without proper clothing and shoes Any act of being warm then getting cold
Leg pain	Cold	Walking or running in excess A fall, injury, or getting tired Trauma Going barefooted Working too much Conditions such as flu, rheumatism, fractures, bilis, radiating back pain, varicose veins Nervousness Certain activities such as ironing, wearing nylon stockings with elastics Lack of calcium
Throat pain (sore throat)	Dust Cold Rain Aires	Drinking cold liquids Getting wet Taking a bath and then going outside without a sweater Other illnesses such as flu, colds, tonsillitis, cough Talking, singing, crying in excess

Table 16 Continued

Illness Manifestations	External Ascribed Cause	Internal Ascribed Cause
Fever	Heat Changes in climate	Not taking care of yourself, especially not taking proper care of colds and flu Getting wet or going out in the cold when you have a cold Other illness, such as stomach infections, bronchitis, pneumonia, measles, typhoid fever, inflammation or infections Immunizations
Stomach pain (stomach ache)	Cold	Eating spoiled or bad food Getting very hungry Eating too much or too fast Eating when not hungry Getting angry Other conditions such as gastritis, cholera, bilis, dysmenorrhea, bad digestion Eating cold foods such as ice cream Eating fried foods Certain combinations of foods and behaviors such as eating avocados and then

Table 16 Continued

Illness Manifestation	External Ascribed Cause	Internal Ascribed Cause
Stomach pain (stomach ache) cont.		drinking milk or getting angry and then drinking hot chocolate

[a]Causes listed in order of frequency of reported occurrence.

that a) involved the individual's own actions or behaviors, and/or b) reflected notions of susceptibility or vulnerability on the part of the ill individual.

Ascribed Causation of the Illness Manifestations

As suggested by the illness manifestations described in Table 16, the term enfermedad (illness), was generally applied to any condition which made a person feel bad and it was seen in terms of a fairly generalized view of the human body. Two kinds of conditions must be explored in order to interpret causation ascribed to the illness manifestations. The first condition was that of the individual's psychophysical state or the condition of being strong-weak or hot-cold. The second condition had to do with extreme or intense emotional states. A person who became ill was said to have been too hot, too cold, chilled, or weakened by a variety of causes. Extreme anger, passion, grief, fright, or sadness could render a person susceptible to illness.

The concept of strength was usually applied to people, but could be applied to natural phenomena or inanimate objects. A strong person was seen as an adult; men were believed to be stronger than women. Strong persons were able to work hard and did not suffer from illnesses; they were able by virtue of their strength to withstand heat, cold, exhaustion and adversities. Children, because they are not fully developed, were viewed as weak; they were believed to be more susceptible to illness and were not able

to withstand physical hardships. Childbirth and menstruation rendered women weak and special precautions were encouraged during these periods for extra protection. Culturally classified strong foods were avoided during menses, as was vigorous exercise, exhaustion, heavy work and other factors which might further aggravate the weakened condition, such as getting too hot or too cold. Other conditions leading to weakness in both sexes were overexertion, sweating, hard physical labor, wounds or trauma, or any other illness.

Hot and cold qualities, which have been historically attributed to Spanish classical medicine, were by far the most common conditions believed to influence health and illness in this population. The qualities of hot and cold had no relationship to actual temperature, but were ascribed states of various objects or persons. The notion of balance was intertwined with the concepts of hot and cold. Good health required a balance or a maintenance of equilibrium between the two extremes. A person should not remain either "hot" or "cold" for too long. Even more important, a person should not change quickly from one state to the other. For example, if a person had been walking outside and entered a house, he should not remove his coat or sweater immediately. It was believed that his blood was "hot" and to "cool" it down quickly would result in susceptibility to illness. Tasks such as ironing or cooking would cause the blood to heat and it should not be cooled down quickly by going outside in the cold. Mothers in the sample reported reluctance to take ill children with fevers to a physician because

the physician would take off the "hot" infant's clothes and place a cold stethoscope against the child's chest.

Emotional tension or strong feelings could cause qualities of strength or weakness in individuals. A person who was very angry could become muy fuerte (very strong) and cause illness in others by his strong state, or he might become weakened by his state of anger and become susceptible to certain illnesses. A "strong" person could inadvertently cause the child to suffer from mal ojo. Many of the traditional illnesses such as bilis, susto and cólera were associated with intense emotional states.

Table 16 shows that data pertaining to ascribed causation of illness manifestations could be roughly divided into two major categories, external and internal causation. Some authors, notably Adams and Rubel (1967) and Wisdom (1952), who have studied illness concepts in traditional Guatemalan Indian communities have found that animation of the environment was commonly used to explain illnesses in Mesoamerica. Gods, saints, spirits, ghosts and volitional aires (airs) were believed to cause illness. Table 16 shows that nonvolitional factors such as hot-cold, strength-weakness and emotional states were the most frequently cited causes of illnesses. Anthropomorphic causes of illnesses were not reported as important causes of these common illness manifestations with one exception. Aires is an elusive concept that has often been cited as a volitional cause of illness (Adams & Rubel, 1967). Aires, as defined by informants in the sample, meant an "air" or the "wind". It was believed possible for "bad air" or a "bad wind",

or una fuerza (a force) to enter the body directly and cause illness. However, most informants said they believed that aires caused respiratory illnesses because the wind blew the dust which contained microbios (microorganisms) into their noses and mouths. The microbios were then inhaled into the lungs and respiratory tract and subsequently illness occurred. The illness manifestation of chest pain had a variety of ascribed causes including aires and fuerzas. It was interesting to note that only three persons within the group of 70 respondents associated chest pain with the heart.

One explanation is that illnesses have been redefined by this population. They no longer report animation such as a belief in witches or bad spirits as explanations for illness. Because of their urban exposure and educational level, these beliefs have been reinterpreted, placing emphasis on the hot-cold concepts and incorporating elements of scientific medicine. When informants were not aware of the "scientific" explanation (as in chest pain), older and more traditional explanations were utilized. Another example in which a traditional explanation was utilized occurred in the case of alcoholism, which was frequently described by informants as an illness that had an anthropomorphic causation. Informants reported that an espiritu que sufre (spirit that suffers) may enter the body of a debil (weak) person and cause that person to become an alcoholic.

Table 16 shows that the most common external ascribed causes of illness are related to the concepts of hot and cold. Either extreme may cause illness; rapid changes from one state to the

other are viewed as external causative factors in illness. The external ascribed causes of two illness manifestations related to psychological states (sadness and crying) showed no association with the concepts of hot and cold, strength and weakness, but rather were attributed to circumstances in the external social environment.

The illness manifestations of headache, crying, sadness, weakness, lack of appetite and stomach pain have internal ascribed causes that were associated with strong emotional experiences. Although emotional states played some role in the causation of the other illness manifestations, they were the primary internal ascribed causes of headache, crying and sadness, weakness, lack of appetite and stomach pain.

In summarizing the data regarding health beliefs surrounding common illness manifestations several important factors emerged from the data analysis. Ascribed causation of the thirteen illness manifestations were divided into external and internal types of causation. External causes were those environmental conditions or circumstances in the social environment which could directly cause illness, while internal ascribed causation rendered the individual susceptible to illness. Both external and internal ascribed causation can be understood in terms of the hot-cold and strong-weak concepts or the emotional state of the individual. Environmental and nonvolitional factors were reported more frequently as a causation of the illness manifestations than anthropomorphic or other volitional factors.

Therapeutic Actions and Preventive Practice

The same seventy respondents described the actions they would take if they were to experience each of the thirteen illness manifestations. In addition, they were asked to describe what they could do to prevent the illness manifestation from occurring. Table 17 shows the reported actions and/or treatments and the preventive practices for each of the thirteen illness manifestations.

Prescribed Therapy for the Illness Manifestations. As can be seen in Table 17, the respondents to the Health Belief and Practices Interview Schedule reported a wide variety of actions that could be taken for each of the illness manifestations. Health practices depended, in part, upon the integration of a given set of actions with an understanding of the significance of those acts. The concepts of hot-cold and strength-weakness that underlaid ascribed causation were important considerations in many of the actions reported in the treatment of illness.

The concepts of hot-cold and strength-weakness were most evident in the use of home remedies and personal behaviors. If a headache occurred because a person had been standing in the sun, slices of lemon, which is "cold", should be applied to the temples and the forehead. If the headache was caused by the cold, then aspirin, which is "hot", was considered the treatment of choice. Remedios caseros (home remedies) were used for their perceived hot and cold properties. Informants did not necessarily classify all medications as hot or cold, however penicillin was viewed as a cold

Table 17

Illness Manifestations, Reported Treatment Actions, and Preventive Practices[a]

Illness Manifestations	Treatment Actions	Prevention
Headache	Pastillas (pills) from the pharmacy. Analgesics were cited most frequently with aspirin being reported as the analgesic most frequently taken Home remedies were common, with slices of lemon soaked in coffee and then applied to the temples as the one most frequently reported. Herbal teas were also reported Resting in bed Combination of analgesic and home remedy such as alka seltzer and lemon in hot water Prayer was cited as common in Protestant families Only natural treatments, or herbs are used during pregnancy to prevent damage to the unborn child	Not getting angry, taking things calmly Trying to solve problems Avoiding worry Being tranquil and at peace with one's self and family Acceptance Being content and serene Taking care of one's self, such as not getting wet, dressing properly for the cold, not standing in the sun for long periods of time

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Crying	If this occurs because of happiness, it is good Sometimes it is necessary to relieve the "heartache" Talking with friends and family will make one feel better and help solve problems Try to control or stop crying Sedatives and tranquilizers Tea made from the leaves of oranges will stop the sobbing and gasping from excessive crying	Try to take things calmly. Resolve problems by talking with others before they become acute Distractions or diversions Don't think of things that upset you
	Prayer, reading the Bible, attending church	Place your life in the hands of God; all that happens to you is in his plans for you
Sadness	Consultation and consolation from friends and family Distractions such as going to a movie, the park or a soccer game. Involvement in work Prayer Resignation and acceptance A little drink of liquor	There is no way to avoid sadness, it is a part of every life. Accept the hardships in life, learn to live with them Try to resolve problems, talk them over with others Pray for strength and protection

Table 17 Continued

Illness Manifestations	Treatment Actions	Preventions
Sadness cont.	Doctors are not able to cure your sadness; only your own will and God can help you	
Weakness	Eating nutritious foods such as vegetables, milk, eggs, fruits and meats Taking vitamins or tonics Seeking physician's advice and treatment Rest and sleep Vitamin injections	Eating proper foods Having three meals per day Getting proper amounts of fresh air, exercise and rest Taking proper care of one's self when ill The problem is mainly the lack of money to buy the proper foods as often as they are needed
Chest Pain	Linaments such as Vicks, Penitro, or G.M.S. massaged on chest. Home remedies: alcohol, vinegar, or warm oil rubbed on chest; warm drinks; teas or chocolate with butter Medication (analgesics) for pain Inquire at the pharmacy what to do or what	Don't get wet in the in the rain Take proper care of colds, flu, coughs Stay out of the cold air Wear proper clothing when going out in the cold Avoid getting over tired Don't drink cold liquids or eat cold foods especially if you are warm When you are warm

Table 17 Continued

Illness Manifestations	Treatment Actions	Preventions
Chest pain cont.	medicine to take Seek assistance from a doctor promptly Prayer Antibiotics	don't cool off too quickly such as immediately taking off a coat or sweater or when ironing or cooking, don't go directly out to the patio in the cold air
Vomiting	Home remedies; the most frequently mentioned was Alka Seltzer with lemon juice Medication from the pharmacy Laxatives to "clean" the stomach Injections of antibiotics Visit doctor if vomiting persists	Eat only foods that are fresh, well-cooked and clean Do not eat raw fruits or vegetables Do not over eat Eat slowly Eat at regularly scheduled times Be very careful about food; don't eat food purchased "on the streets." (It is not fresh, the vendors have dirty hands, there are always many flies and a lot of dust around. The food is contaminated with microbios) Don't drink excessive amounts of alcohol Don't get angry, especially right before eating Don't eat a lot of fried foods, "heavy" foods, peanuts, coconuts, or other golosinas (tidbits)

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Vomiting cont.		Take medicine for car sickness before travelling
Cough	Home remedies or cough syrups are most frequently reported. Ingredients such as honey, butter, ginger, vanilla, etc. were common Hot chocolate with butter was the most common home remedy for cough Cough syrups purchased at the pharmacy Medications (throat lozenges) from the pharmacy Linaments massaged on throat If cough is serious or persistent, seek advice from physician	Don't drink cold drinks, especially if the body is warm Don't get wet Avoid going outside if there is a lot of dust Take proper care of colds and flu Don't go out in the cold without a coat or sweater Don't take a bath when it is raining or cloudy Avoid exposure to the sun for long periods of time Mineral baths two or three times each month which "refresh" the bronchials
Lack of Appetite	Laxatives to "clean" or empty out the stomach Visit a physician Ask for medicine at the pharmacy Purchase vitamins and/or tonics Try to resolve problems	Try to have peace and tranquility at home, work, and with friends Eat good foods Eat three regular meals per day Be punctual about meals Don't overeat

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Lack of Appetite cont.		Don't eat between meals Maintain good health by proper foods, exercise, fresh air Get up early, work hard, but don't over do it Vitamin supplements, especially for children Laxatives weekly, especially for children
Colds	Decongestant from the pharmacy Home remedies, usually calientes (hot drinks) were frequently reported. Linaments for rubbing the chest and throat	Don't go out in the cold air unless you wear a coat or sweater Don't take a bath with cold water or when it is raining or cloudy Don't get hot and then cool off quickly Don't drink cold liquids or eat ice cream, especially if you are warm or have been out in the sun Eat proper foods, exercise and get enough sleep Give children aspirin after bathing them, especially if the weather is cool
Leg Pain	Massage with linaments	Avoid walking long distances

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Leg Pain Cont.	Soak in special solutions, for example, salt water Rest Keep legs warm See a physician if pain or a sore persists. Ask at pharmacy for medication	Avoid walking long distances Don't go barefooted Rest frequently, especially if you have been standing for long periods of time Get someone to help you if you have to carry something that is heavy Be careful when walkin in the streets that you don't fall Wear special stockings for varicose veins Don't wear stockings with tight elastics. Wear comfortable shoes and don't wear new shoes for long periods of time until they are more comfortable Take prompt care of sores and trauma Keep legs warm
Throat Pain (sore throat)	Gargles Medications from pharmacy Penisilina (penicillin) was the most frequently reported medicine used for sore throats. Lozenges are also purchased Hot drinks	Avoid cold drinks and cold foods Don't go outside if there is a lot of dust Avoid going out in the cold unless dressed properly Stay out of the rain Take proper care of colds and flu Avoid el aire

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Throat Pain (sore throat) cont.	Linaments massaged on the throat and chest were reported Injections of Penicillin and Lincocin Throat swabs Prayer	(the wind) and too much sun Avoid cooling the body quickly when it is warm Avoid over-consumption of things that irritate the throat such as chilies, alcohol, cigarettes or coffee
Fever	Seek professional advice from a physician Medications from the pharmacy; aspirins and oral antibiotics were most frequently mentioned Injections of antibiotics For children: suppositories and herbal baths Home remedies such as herbal teas Alcohol rubs Cold cloth on forehead Laxatives	Taking care of yourself when you have other illness is most important, then complications like fever won't develop Treat colds and flu promptly with medicines, not getting chilled Treatment of other conditions that might cause fever such as stomach infections, bronchitis, and other infections. General good health Avoid cold drinks Avoid getting wet in the rain Try to avoid colds and flu Good personal hygiene Don't bathe when it is cold or with cold water
Stomach pain (stomach ache)	Home remedies such as herbal teas, drinks	Don't get angry Do not eat food that is purchased in the

Table 17 Continued

Illness Manifestations	Treatment Actions	Prevention
Stomach pain (stomach ache) cont.	Alka Seltzer with lemon Laxatives Medications from pharmacy, including antibiotics, anti-parasitics and antacids such as Maalox Injections Enemas Paregoric If very painful or persistent, see a doctor	streets Don't over eat Eat slowly Don't eat cold foods Don't drink cold liquids For prevention of menstrual pain: regular exercise every day and during menses avoid drinking milk, eating avocados, bitter fruits or getting cold or chilled

[a]Treatment and preventive actions listed in order of frequency of reported occurrence.

medicine while aspirin was said to be hot.

Informants reported that they did not always know the hot-cold properties of all medications, but relied to some extent upon their efficacy. Logan (1977) reported that in Chimaltenango, medicines introduced to patients were classified opposite to the culturally known temperature quality of the illness or symptoms for which it was prescribed. In this investigation, other factors such as drug efficacy, accessibility and ease of treatment were reported as important. One informant stated: "Look, it's easier for me when I am at work to go to the pharmacy and buy two aspirins and take them than it is to go to the market for two lemons and then have to wait until I am finished with work before I can use them".

Home remedies were often used first and if symptoms persisted, informants reported that they would seek a medication from the pharmacy or help from a physician. The cost of health services was always an important consideration in all illnesses; informants reported that if the symptoms were serious, or if they continued over long periods of time, they would seek professional advice from a private physician or seek help from one of the public clinics. Many informants said, "If there is no money, all you can do is wait".

The illness manifestations related to psychological states (crying and sadness) were viewed by most informants as being outside of the realm of medical treatment. Statements such as "There is nothing a doctor can do to cure you" were common, although two informants reported purchasing sedatives and tranquilizers from

the pharmacy for various emotional states. One woman reported that her husband abused alcohol, was nervous and irritable all of the time, and needed pills for sleep every night.

Three general themes or patterns emerged from informants' responses to the treatment and management of crying and sadness. The first theme involved notions of acceptance and resignation. This was especially apparent in Protestant families who used faith healing and prayer for nearly all illnesses. Their belief that man is placed on earth to suffer and that the degree of salvation in the hereafter is related to suffering here on earth lead to a fatalistic approach to illness. They often said, "There is nothing you can do, it (the illness or the sadness) is in the hands of God". The second pattern in the responses to psychological states was a belief that a distraction or diversion was the only way to deal with personal problems. Many respondents said, "I just walk away from my problems". "I try to get out of the house". "I just try to forget them". The third theme evident in the respondents' responses was the belief that talking with family and/or friends would make a person feel better. All seventy respondents indicated that they had never sought professional counseling or mental health services. They were aware of such services from various television programs and some informants were aware that limited services were available in Quetzaltenango. Most informants reported that they would not feel comfortable in seeking such services. The men in the sample seemed to reject the possibility of counseling services more adamantly than did the women.

The frequent use of self-treatment or home remedies may be explained by several factors. Symptoms were interpreted as "treatable" within the home situation. At other times, seeking outside care was not convenient within the framework of daily activities. The cost of professional care was always a concern for poor families.

Most respondents indicated that for most illness manifestations (except sadness and crying), they would seek advice from a professional physician if the condition were serious (painful, incapacitating, etc.), or, if it persisted for a long period of time. The possibility existed that lay management of symptoms which did not appear critical because of a cultural interpretation could in fact be indicative of serious illness. The illness manifestation of chest pain represents such an example with only three of the seventy respondents associating chest pain with cardiac function.

The availability and easy access to antibiotics and other drugs created a potentially dangerous situation. Respondents reported what could be viewed as a "casual" use of antibiotics (both oral tablets and injections) as well as frequent use of other medications. Since the sale of drugs was not controlled by physician prescriptions, a wide variety of drugs were reported as being used in the treatment of colds, vomiting, chest pain, sore throats, fever and stomach pain. The use of medications by lay persons with little understanding and knowledge of their actions and side effects may be harmful. In particular, penicillin, reportedly was used frequently for bruises received from spouse battering because

"it made the colors diappear more rapidly."

Prevention of Illness Manifestations. The data show that prevention was regarded as control of those conditions that could lead to illness. As might be expected, Table 17 shows that preventive practices were based on ascribed causation of both internal and external factors. The data revealed that preventive measures were indicated when the individual was thought to be able to manage his conduct or his condition. When the individual had no control over external factors, preventive measures could still be taken on an individual level to lessen the susceptibility or the impact of the illness. In some instances both internal and external factors were amenable to some degree of prevention.

Concepts of hot-cold and strong-weak and the emotional states of the individual were the basis for many of the preventive practices reported by the sample. Preventive practices against external prescribed causative factors included actions such as not staying out in the sun for long periods of time, not getting wet, and wearing protective clothing against the cold. Avoiding the wind and dust was thought to be important in the prevention of illnesses, especially respiratory conditions.

Preventive measures for internal ascribed causation of illnesses involved avoidance of strong emotional states such as anger, worry, and sadness. Personal behavior based on a belief in the hot-cold concept was viewed as especially important. Avoiding cold drinks and foods, wearing protective clothing, not getting wet or chilled and avoiding extreme temperature changes in the body were

reported as important preventive health care behaviors. Other preventive health practices were associated with good nutrition, fresh air, exercise and proper amounts of sleep.

It is important to note that the preventive behaviors were not only logical in terms of the ascribed causation, but reflected various aspects of the cultural context in addition to the health belief system. Informants reported that the illness manifestation of vomiting could be prevented to some extent by using extreme care and caution about foods. All informants reported that to prevent vomiting a person must be certain that foods are fresh, clean and well-cooked. This is excellent health advice in a developing country where enteric diseases are frequent not only in travelers but indigenous people also.

Spanish classical medicine contained other concepts in addition to the hot-cold and strong-weak dichotomies. For example, there were concepts of rough-smooth and wet-dry. For the most part, the people of Mesoamerica have retained only the hot-cold and strong-weak dichotomies. In the preventive measures reported for the illness manifestation of cough, there was some evidence of the wet-dry concept. Polvo (dust) was seen as an explanation for cough; dust could "dry out" the lungs and the bronchials. It was reported that hot mineral baths with their associated vapors would moisten or refresh the lungs and respiratory tract.

In summary, preventive practices were based on the beliefs of ascribed causation. Measures were directed toward external factors in the environment and those personal behaviors which de-

creased susceptibility in individuals. The concept of hot-cold was most important in preventive practices along with the concept of strong-weak. Other preventive practices reflected the belief that good health was maintained by a notion of balance--adequate nutrition, rest, exercise, fresh air, and moderation in eating, work and personal habits.

Perceived Seriousness of the Illness Manifestations

The seventy respondents to the Health Belief and Practice Interview Schedule were asked to rank order the manifestations of illness from the most serious to the least serious. For the purposes of ranking the illness manifestations, the two manifestations of crying and sadness were shown as one manifestation (crying and sadness). The rank order and mean rank score of twelve illness manifestations are shown in Table 18.

As can be seen in Table 18, the sample ranked fever as the most serious illness manifestation with a mean rank score of 2.84. Fever was followed by stomach pain with a mean rank score of 4.46 and weakness with a mean rank score of 5.15. Leg pain was ranked as the least serious condition with a mean rank score of 9.59, with colds ranked as the next least serious condition with a mean rank score of 9.41.

Respondents to the Interview Schedule reported that fever was a serious manifestation of illness because it could be mortal (fatal). They reported that a person with a high fever was always

Table 18

Rank Order and Mean Rank Score of Illness Manifestations

Mean Rank Score	Rank from Most Serious to Least Serious
2.84	1. Fever
4.46	2. Stomach Pain
5.15	3. Weakness
5.92	4. Vomiting
5.97	5. Throat Pain
6.54	6. Headache
6.63	7. Lack of Appetite
6.92	8. Cough
7.26	9. Crying and Sadness
7.92	10. Chest Pain
9.41	11. Colds
9.59	12. Leg Pain

seriously ill and the fever might be indicative of another serious condition such as bronchitis, pneumonia or measles. Fever was associated with infectious processes which were considered serious and grave conditions that required prompt medical intervention.

Stomach pain was viewed as serious because possible complications might require surgical intervention. Surgery was viewed with concern and anxiety and was considered an extreme measure that could result in death. Illness manifestations that were ranked as most serious were those conditions that were believed likely to develop complications. These illnesses required a physician because they were not amenable to the applications of home remedies. The duration of a serious illness was protracted and the sick person was unable to carry out his or her usual daily activities.

Colds and leg pain were viewed by the sample as the least serious manifestations of illness because although they caused a person to be uncomfortable, they usually lasted only a short time and did not result in complications. Persons with colds or leg pain might not feel well but they were usually able to carry out their routine daily activities. Colds and leg aches and pains could be treated effectively at home with home remedies and did not need the attention of a physician. They were common occurrences and it was believed that effective measures could be taken to prevent them from occurring.

Traditional Illnesses

Respondents to the Health Belief and Practices Interview

Schedule were asked to describe traditional illnesses (those illnesses that "doctors do not believe in") and what actions or treatments were believed to be beneficial. Respondents were able to describe a number of traditional illnesses and health care practices. This review of traditional diseases is not exhaustive; brief descriptions and beliefs surrounding some common traditional diseases are presented to facilitate an understanding of traditional health care beliefs and practices in the sample.

Lombrices

Respondents stated that physicians did not believe in lombrices (parasites). After further discussion and clarification, it was agreed that physicians believed that parasites existed, but they did not have all of the beliefs about lombrices that were adhered to by the sample.

Mothers complained that at times they suspected a child had lombrices, but when they took the child to a physician, he could find nothing wrong with the child. The child would continue to have a stomach ache and a poor appetite. Sometimes the mother would consult another physician or try a home remedy to rid the child of the lombrices.

The sample members described traditional beliefs that explained the occurrence of lombrices. They reported that every person has a small bolsita (bag or sack) within his or her stomach. There were always lombrices within this sack; when the lombrices came out of this little sack, the person (nearly always a

a child) had symptoms of vomiting and diarrhea. Once out of the sack, the lombrices traveled through the bloodstream to all body systems and exited through the stool and vomitus. Children whose condition had reached this stage of illness were very palido (pale) and their eyes were blanco (white), and triste (sad). Their noses, ears, and eyes itched and they were constantly scratching at them. When a child was given medicine to cure the illness, the lombrices returned to the sack in the stomach where they remained in a dormant state.

Juana, a six year old child had the signs and symptoms of lombrices. Her mother took her to a doctor who said that he could find nothing wrong with her. The mother then took her to a cura in a neighboring town who prescribed a toma (drink) for the child. The ingredients of the toma were reported as follows:

a little water,
four drops of gasoline,
a little lemon juice,
a little sugar, and
a jar of syrup of Viperaguit.

The mother reported that after the administration of the curacion (cure), the child recovered.

Susto

Susto is an emotional state caused by severe fright. Respondents reported that it is most common in young children ages four to eight years who often awakened in the middle of the night

screaming with terror. Mothers reported that sometimes they spanked their children, but usually they just held them in their arms until they returned to sleep. Older people, especially women, also experienced susto. During the time of this investigation, the central market in Quetzaltenango burned, destroying some three blocks of buildings and causing an estimated three million dollars in damage. Many members of the sample worked in the market; the day after the fire, four women in the sample remained at home in bed complaining of susto.

There was a cura in Quetzaltenango who was known for her ability to cure young children of susto. She prescribed herbal teas and special herbal baths before bedtime. A number of mothers reported that they had taken their older children to her, but now, with their younger ones, they simply followed the advice she had given them in the past.

Bilis and/or Cólera

Bilis was probably the most frequently reported traditional illness during the course of this investigation. It was believed to be caused by strong emotions of passion, anger, fright or extreme sadness. Cólera, which was believed caused by anger or other emotional upsets, was another term which was used interchangeably with bilis. Cólera was believed to be precipitated by quarreling, and in its extreme form could lead to a desrame (stroke) with resulting paralysis.

Doña Marta suffered from bilis caused by the worry and stress

of trying to care for her mischievous great-grandson. Doña Emelia reported that when her husband died, she experienced an attack of bilis so severe that she was unable to leave her house for over a six month period. Doña Luisa reported that she suffered from a gran cólera (severe cólera) each time her oldest son stayed out late at night drinking.

Strong emotions, especially anger, were seen as a kind of illness in some people and lead to a "weakened" state so that they were susceptible to other illnesses. There is some evidence in the literature (Madsen, 1960) that has suggested such illnesses occur more frequently in women, especially in those societies that prescribe a limited role for women and where strong expressions of emotion are not socially sanctioned. During the time of this research, several women reported experiencing cólera or bilis, whereas men did not. Informants generally agreed that men could become very angry, but they usually did not become ill from the experience unless they were old and weak, in which case they might suffer a stroke. Madsen (1960) suggested that anger caused bilis in Indian women in Mexico more often that it did in men because men could take out their frustrations by beating up a friend or a wife, or by getting drunk, which a woman could not do. This appeared to be the case in the colonia where alcohol indulgence and spouse abuse were common male practices and cólera and bilis occurred in the female population.

Empacho

This traditional illness was viewed primarily as an illness of children; it was believed caused by the presence of an undigested ball of food in the stomach. An infant with empacho was reported to be irritable, cry frequently, to have diarrhea, fever and los colicos (colic). It was believed that the ingestion of certain kinds of food such as soft breads, bananas (especially the center portion), or potatoes could cause empacho. If such foods were eaten at night and followed by drinking water, chances of the child getting empacho were increased.

Purgatives or laxatives were the home remedies used in the treatment of empacho. They were also considered preventive measures for the illness. When oil was given orally to a child, it was believed important not to bathe the child for three days because the oil would cause the pores of the skin to open. If a child was bathed, water could be absorbed through the pores and swelling or edema would occur.

El Ojo

El ojo (the evil eye) was the most common traditional childhood illness reported by the sample. Nearly all mothers used some protective or preventive measures to ensure that their babies would not suffer from ojo. It was believed that el ojo occurred when a person who was fuerte (strong) admired a pretty baby without touching the child. This incident usually occurred outside of the home. After a few minutes, the child would begin to cry and would

become very irritable. It was usually the mother or grandmother who applied the cure for el ojo. The treatment consisted of peppers, chilies and garlic. These were applied to the head, hands, feet and chest of the child. Water, herbs and oil were also given to aid in the cure.

It was reported by the sample that children could be protected against el ojo in various ways. Little girls had their ears pierced when they were two or three months old and subsequently wore tiny red earrings. Red was considered a "strong" color that would protect a child from the effects of el ojo. Infants were often dressed in red caps, red sweaters and wrapped in red shawls. Infants of both sexes wore red string bracelets around their wrists. The best preventive measure was believed to be a little red bolsita (bag) which contained pepper, chilies and garlic and was placed around the neck of a child.

Younger and "less traditional" mothers tended to use fewer preventive measures against el ojo than did older mothers. One young mother reported that her little girl had worn the red earrings; the grandmother had insisted on the string bracelet, but the mother had absolutely refused the red bolsita. A number of young mothers were asked if they believed el ojo caused sickness in children. They replied, "Well, sometimes we do and sometimes we don't. It's hard to say, sometimes babies get sick and you do not know what is wrong. Everybody says it's ojo; maybe it is, who knows? "

Informants generally reported that "some people" believed el

ojo was caused by brujos (witches or witchcraft). The younger parents reported that they did not believe in witches or evil spells anymore, that such beliefs were only creencias (beliefs) adhered to by older people. Some of them reported that maybe witchcraft was possible, but they doubted it.

There was a resident brujo in San Marcos who reportedly was a "good" witch, or one that did not cast evil spells. He reported that he was able to advise clients about sickness and could offer protection against disease, but his most important skill was the ability to predict the future. He used playing cards which enabled him to "see" the events in the future, especially as they pertained to love matches. Most of his clientele were from outside the colonia; some residents of the colonia said they did not know that he was a practicing witch.

The data show that beliefs and practices surrounding traditional illnesses are changing. Bilis or cólera was now primarily an illness of women, while susto, empacho and el ojo primarily afflicted children, although occasionally women suffered from susto. Rather than seeking the services of a cura, most informants reported that these conditions were treated at home with various home remedies. If the condition persisted, or symptoms became more acute, families often sought the services of a cura. One mother reported that when her baby was ill, everyone said it was el ojo; however, she took the child to a physician because the child had a high temperature and she and the child's father believed that physicians were able to treat fevers more effectively than curas.

It is important to note the differing interpretations of conditions such as lombrices between health professionals and their lay clients. As members of the sample have incorporated scientific medical beliefs into their own understandings, they have been interpreted or redefined in such a way as to be coherent with traditional beliefs.

Health Histories of the Sample

Each nuclear family within the households was asked to describe the kinds of illnesses that they had experienced and the utilization of various health care specialists. Families were asked if they were satisfied with the care they received from health care specialists and why they were satisfied or dissatisfied. Families were also asked about the vaccination status of their children and were requested to rate their individual health status as good, fair, or poor. The Health History Interview Schedule (see Appendix C) was administered to the 36 nuclear families within the sample.

For the purposes of this study, an incident or symptom of ill health was defined as having a disease, not feeling well, or a period of sickness. Conditions were recorded as related by the informants. Some conditions were expressions of health problems as defined and related by the individual. Other conditions reflected the diagnosis or labeling by health care specialists.

Table 19 summarizes the frequency of symptoms within the household during the six month period from January through June,

Table 19

Households and Family Members for Whom Sickness Symptoms were Reported During a Six Month Period, 1980

Total Number In Study	Number with Symptoms	Percent with Symptoms	Source of Care[a]		
			Private Physician	Public Facility	Curandero
22 Households	21	95.5			
134 Persons in these households	86	65.0			
61 Children	51	83.6	17	12	2
31 Adult males	13	41.9	2		2
42 Adult females	22	52.4	7	5	4

[a]Self-care or treatment at home is not included.

1980. Since the data shown in this table covered a recent six month period, it can be assumed that the informants' ability to recall symptoms of illness was fairly accurate. Only one household reported no symptoms during this period. The remaining households, or 95.5 percent, reported some symptom(s) of sickness for one or more members of the household. A symptom was reported, on the average, for two out of every three persons. Symptoms were reported for 83.6 percent of all children, 41.9 percent of all adult males and 52.4 percent of all adult females.

In seventeen episodes of sickness, children were taken to private physicians for care. On twelve occasions care was sought at public facilities and during two episodes of illness children were taken to lay practitioners or curas. Adult males sought care two times from private physicians and two times from curas. Adult females with sickness sought care seven times from private physicians, five times at public facilities and four times from curas.

Table 19 indicates that as a group, children have more reported illnesses than adults and women reported more illness episodes than men. Care from private physicians was the type of care most frequently utilized, followed by professional care from sources located in public facilities and curas.

Sickness Experiences of Adults

The illness conditions were then classified into broad categories by the investigator. Respiratory and gastro-intestinal symptoms, as well as contagious diseases, were easily identified

on the basis of information supplied by the informants. Other symptoms were classified under problems of lower extremities, neurological and emotional difficulties. The category of "other" was added to include infrequently reported episodes which did not fit in the other categories. The category of other included some serious acute as well as chronic problems. Examples were heart problems, accidents, backache, weakness and fatigue. Individual client visits to health care specialists were recorded. If a person utilized a source of care three times for the same condition, this was recorded as one sickness condition and three visits to a source of care.

Table 20 shows reported conditions of ill health experienced by adults during the six month period from January through June of 1980. Informant responses and sources of health care are also shown in Table 20 and will be examined after the sickness experiences are discussed. As can be seen in Table 20, the most frequent episodes of ill health experienced by adult members of the sample population occurred in the category of respiratory conditions. Nearly everyone in the sample reported that they experienced colds, flu and cough once or twice each year. Respiratory conditions account for almost 70 percent or 76 incidents of ill health. The categories of gastro-intestinal and abdominal conditions contains 11.6 percent of all sickness experienced. Emotional difficulties (4.5 percent), neurological problems (5.4 percent), problems with lower extremities (4.5 percent), and others (6.3 percent) account for all other reported instances of ill health

Table 20

Reported Conditions of Ill Health and Responses by Adults[a] during a Six Month Period, 1980

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self-Treatment	Private Physician	Curandero	Public Facility
Total	112	100	104	11	8	6
Respiratory	76	67.9				
Colds	28	25.0	28			
Flu	30	26.8	30			
Cough	15	13.4	15			
Tonsillitis	2	1.8	2		1	
Asthma	1	0.9	1		1	
Gastro-intestinal and Abdominal Conditions	13	11.6				
Stomach Infections	1	0.9	1			
Gastritis	1	0.9	1			
Abdominal Pain	6	5.4	4	3	2	1
Liver Problems	2	1.8	2	1	1	
"Female" Problems	3	2.6	2	2		2
Emotional Difficulties	5	4.5				
Nervousness	4	3.6	3			1
Insomnia	1	0.9	1			

Table 20 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self-Treatment	Private Physician	Curandero	Public Facility
Neurological	6	5.4				
Headaches	5	4.5	5	2		
"Attacks"	1	0.9		1		
Problems with Lower Extremities	5	4.5				
Pain	1	0.9	1		1	
Leg Infection	1	0.9	1			1
Edema	1	0.9		1	1	
Fungus	2	1.8	1		1	
Other	7	6.2				
Diabetes	1	0.9	1			1
Bilis	1	0.9	1			
Heart Problem	1	0.9		1		
Back Pain	4	3.6	4			

[a]N = 73, All persons 18 years of age and over.

[b]Based on total number of conditions reported in the category and including multiple responses.

experienced by members of the sample during this six month period.

Female problems were reported to be such conditions as dolor de los ovarios (ovarian pain), uterine bleeding, and dysmenorrhea. Ataques (attacks), were described by a 21 year old female as periods of weakness, dizziness, and occasional loss of consciousness. They are shown under neurological conditions although it is possible that they reflected an emotional component also.

The single reported incidence of a folk illness in this six month period was bilis, a condition that originates in a person who experiences sensations of anger, passion or fright. Doña Marta, a 74 year old woman, reported that she occasionally suffered from bilis which caused stomach ache and loss of appetite. She attributed this condition to the fact that she was responsible for tending her active two and one-half year old great-grandson and she said that "he is always getting into mischief behind my back."

Tables 32, 33 and 34 (see Appendix G) show the reported conditions of ill health and responses by adults during the previous five years. The results are similar to those shown in Table 20. Respiratory conditions were reported as the most frequently experienced type of illness followed by gastro-intestinal and abdominal conditions.

Adult Responses to Sickness: Treatment at Home

As can be seen from Table 20, informants attempted some form of self treatment in most cases of illness. This included home

remedies made from herbs or medications purchased from a local pharmacy. In Guatemala, it was possible to buy a wide variety of medications without a prescription. Antibiotics, medications containing barbiturates, tranquilizers, sulfa preparations and others could be purchased over-the-counter. A very common practice was for an individual to visit a pharmacy and describe his symptoms to the pharmacist, who would suggest an appropriate medication.

Respiratory conditions were treated at home more frequently than any other category of ill health. Other conditions were treated at home prior to seeking outside care if it was deemed neccessary. Many informants reported that they continued to treat conditions with home remedies after professional services had been obtained when illness occurred. The most frequent course was an attempt to treat the illness in the home; if the symptoms continued or became progressively worse, professional services were obtained.

Reported Use of Health Care Specialists by Adults

There were a wide variety of health care specialists in the city of Quetzaltenango. There were approximately 45-50 private physicians engaged in general and/or specialized medical practices. There was a new 75 bed private hospital equipped with modern equipment. Hospital costs were modest by North American standards. A private room was Q28 per day; semi-private rooms were Q22 per day. Private physicians charged Q5-10 per office visit.

One of the universities in Quetzaltenango had a medical school; a number of private physicians served on the teaching staff. There

was a three year diploma school of nursing located in the city, one of three in the entire country. Public facilities included a general hospital, a children's hospital, both of which were staffed primarily by medical and nursing students under the supervision of faculty from the medical and nursing school. Medical students also served on the staff of a number of clinicas gratuitas (free clinics) located in various areas of the city. Many of the clinics were sponsored by the Catholic church.

There were many different kinds of indigenous health care specialists in Quetzaltenango. The types of healers, their roles and dimensions will be discussed in depth in a later section. For the present analysis, a healer was a person (either male or female) who had not completed formal academic medical training, but had the ability to treat, heal, or cure various illnesses or diseases. Most types of indigenous practitioners were called curas[1] by the people of San Marcos. They were also called doctores (doctors) whereas western trained medical specialists were doctores or medicos, never curas. Curas were either generalized or specialized according to their practice.

Table 20 and Tables 32, 33, and 34 (see Appendix G) show that adult members of the sample reported that they consulted with physicians more frequently than curas. Adults reported that in every year during the previous five years, they utilized services of private physicians more than health services offered in public

---

[1] Cura may also be used to refer to a priest. Spiritualists were not called curas; they were referred to as espiritistas.

facilities. From 1979 to 1980 there was an increase in the reported utilization of private physicians for health care and a corresponding decrease in the use of the various public facilities.

Expectant mothers usually utilized the professional health services available at public facilities rather than seeking care from private physicians. Pregnancy was not considered a condition of ill health or sickness, but was reported under responses and utilization of health care. Thirty-two children were born to mothers in the sample during the previous five years. One mother, who was covered by private health insurance through her husband's place of employment, made eight antepartal visits to a private physician and was delivered in a small maternity clinic owned by the physician. All of the other thirty-one women utilized the obstetrical clinic at the general hospital. The clinic charged 25 centavos (cents) for each clinic visit. In addition, the hospital pharmacy offered a discount on medication. The thirty-one women averaged three reported antepartal visits to the clinic prior to delivery. For the last 20-25 years in Quetzaltenango most births have taken place in hospital settings.

All other hospitalizations reported by sample members during the previous five years were in the general hospital. Sample members reported that when health services were extensive or prolonged, public facilities were utilized because of the cost factors. When informants believed that illness conditions could be adequately cared for in a short period of time, the majority of them chose the services of private physicians rather than care in

public facilities.

Sickness Experiences of Children

Table 21 shows reported conditions of ill health and responses to incidents of sickness in children during a six month period, January through June, 1980. As can be seen in Table 21, respiratory conditions accounted for 71.4 percent of all illnesses in children. Bronchitis and bronchial pneumonia occurred more frequently in children than adults. Colds, flu, and cough were the more frequently occurring conditions which caused sickness. The category of gastro-intestinal conditions accounted for 10.5 percent of all conditions, with stomach infections accounting for 9.6 percent of this category. Contagious diseases of childhood accounted for 8.5 percent of all illness conditions, with measles being the most common childhood disease. Informants did not differentiate between rubeola or rubella; they simply labeled a childhood disease that caused fever and a rash as sarampion (measles). The category of "other" accounted for 10.4 percent of all conditions.

One child, aged 11 months, died of complications from a stomach infection during the course of the investigation. The parents had taken the child to visit the mother's relatives who lived on the coast. On the second day of the visit, the child ate some candles that had been placed near a small altar in the home. The parents took her to a physician three days after the incident. He reportedly gave the child injections and oral medication. The child died the following day. The father's family was very

Table 21

Reported Conditions of Ill Health and Responses in Children[a] During a Six Month Period, 1980

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self-treatment	Private Physician	Curandero	Public Facility
Total	105	100	88	18	3	13
Respiratory	75	71.4				
Colds	28	26.6	28			
Flu	27	25.7	27			
Bronchitis and Bronchial Pneumonia	4	3.8	4	2		2
Croup	1	0.9	1			
Cough	15	14.3	10			
Gastro-intestinal	11	10.5				
Stomach infection[c]	10	9.6	5	4	1	2
Diarrhea	1	0.9	1			
Contagious diseases	9	8.5				
Measles	6	5.7	4	7		
Impetigo	1	0.9	1			
Hepatitis	1	0.9	1	1		
Poliomyelitis (non-acute)	1	0.8				6

Table 21 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self treatment	Private Physician	Curandero	Public Facility
Other	11	10.4				
Fever	2	1.9	1			
Bladder Infection	1	0.9		1		
Surgery (hernia repair)	1	0.9				1
Earache	2	1.9	1	2		
Allergy	2	1.9	2	1		1
Accident	1	0.9				1
Swollen glands	1	0.9	1			
Lack of appetite	1	0.9	1		1	

[a]N = 61; based on all children in the sample 17 years of age or younger at the time of the survey.

[b]Based on total number of conditions reported in the category and including multiple responses.

[c]One infant, age 11 months died as a result of a stomach infection.

distressed and bitter about the child's death; they reported that the mother never watched the child closely and had delayed seeking medical care.

The health histories for children in the sample for the previous years are shown in Tables 35, 36 and 37 (see Appendix H). The most common category of ill health experienced by children was respiratory illnesses. Gastro-intestinal conditions and contagious disease caused significant number of illnesses in children.

Responses to Sickness: Treatment at Home for Children

As can be seen from Table 21 most incidents of ill health in children were treated by various methods in the home situation. Colds, flu and cough were most commonly treated at home rather than by the use of outside sources. Home treatment, or the management of the illness by the family, generally consisted of the administration of herbs. They were served frequently as tepid drinks or teas. Herbal baths to alleviate fever were common. Treatment of minor illnesses at home was a common practice. Nearly every household had various herbal plants growing in the patio. They could also be purchased for a few cents in many stores or the market.

Medicines were purchased at the local pharmacies and given to ill children. If a mother belived her child needed an injection of penicillin because the child had a severe cold or the flu, the penicillin was purchased at the pharmacy. The mother took the medicine and the child to an *injeccionista*. Doña Silvia was the local *injeccionista* in the colonia. She charged 15 centavos

for each injection and she provided the needle and syringe. None of the families reported utilizing the services of an inyeccionista during the five year period of the health histories, but it was a very common practice. Some women in the sample had needles and syringes and were able to give injections of various kinds to their families, friends, and neighbors.

Reported Use of Health Care Specialists for Children's Health Problems

Children were more likely to receive care at public facilities than were adults. This may be because children, as a rule, experienced illnesses more frequently and the cost of frequent care was a concern.

In the six month period of 1980 (Table 21), children received care more often from private physicians than from other sources. Tables 35, 36 and 37, shown in the Appendix indicate it was reported that prior to 1980 children received the majority of their health care in public facilities. More data are necessary before assuming that treatment of children's illnesses shows a trend toward utilization of private care for the majority of sickness episodes. Utilization of health care could have been underreported for the other five years.

Six of the visits to public facilities shown in Table 21 were made to El Centro de Polio in Guatemala City for continuing care and supervision of Roberto, a two year old boy who contracted poliomyelitis in 1979. Although this was a public facility, the

services were not necessarily free. The clinic was sponsored by the government and all cases of polio were referred there for treatment and therapy. Clients were asked to contribute what they could afford for the care they received. If clients were unable to make a financial contribution, care and services were still provided. For example, Roberto was fitted with a new leg brace that cost Q75; his parents contributed Q35 to the cost of the brace. The father earned Q125 per month, so this was a substantial contribution for them. Roberto's mother reported that when he first became ill, she thought he had an enfermedad sencilla (a simple illness). The mother was born in a small pueblo outside of Quetzaltenango. She reported that there was a well-known cura in her pueblo so she took the child to the cura. He prescribed various remedies for the fever, vomiting and lack of appetite. The symptoms became progressively more acute and when the parents realized that Roberto had a serious illness, they immediately took him to the emergency room at the children's hospital. He was treated for the acute stage of the illness and referred to El Centro de Polio for further care.

Problems and Concerns with Professional Health Care

Overwhelmingly all adult members of the sample reported that they would prefer to go to private physicians for health care. They believed that a person received the best care if the physician knew them and was familiar with their past health histories. In addition to continuity of care, informants said they would

like to consult physicians who are pleasant and have a personal interest in their patients and who take time to explain the patients' condition and prescribed medications or treatments.

However, informants were pragmatic about obtaining health care. What really concerned them most was the cost of care. They reported that if they had the money to pay for a private physician, then they would see one. If they did not have the money, they would go to one of the public facilities for care. One informant said, "If you do not have any money, then you do not have a choice. You will go anywhere where anyone will see you even if you have to wait all day." Another informant reported that when she did not have quite enough money for a visit to a physician and some medicine, she would forego the visit and go directly to a pharmacy, where she would relate her symptoms and purchase medication which usually alleviated her symptoms.

What was especially frustrating to informants was to visit a physician and purchase the prescribed medication and then not experience any relief from symptoms. There was a considerable amount of physician "shopping." Not only would informants visit a physician who was reported to be "cheaper" than others, but if they did not experience alleviation of their symptoms, they would seek another physician rather than returning to the original one. One mother angrily related that she took her two children who were ill with the measles to a private physician. He examined the children and told her that they did indeed have the measles. She was charged Q16 for the office visit. The next day she took

the children to another physician who gave them some medicine which she reported was successful in alleviating their symptoms.

Informants reported that they tried to visit physicians who gave "sample" medications rather than prescriptions. The cost of health services was a constant consideration in the choice of where to go for health care. It was the major criteria for decision-making regarding choice in professional health care services. Informants believed that care from private physicians was better than the care received from physicians in public facilities because clients received more attention and interest from private physicians. It was believed that private physicians had more skills in both diagnosing and treating disease and were more likely to "cure" the patient.

Informants offered a number of opinions about health care services received from public facilities. Informants reported that they sought care at public facilities for one of two reasons. First, the health problem was fairly serious, regarding numerous consultations and/or hospitalization. Residents of the colonia could not afford the costs of prolonged or expensive medical care. Secondly, if the health problem was minor and the ill person had plenty of time, he would seek care at a public facility. This means that for the broad range of illnesses which do not require extensive care yet are not really minor, the majority of informants preferred private physicians.

Informants reported that they did not have a great deal of confidence in the "student" physicians working in the public

clinics and hospitals; physicians and nurses were always rushed.

Alfonso described the care received by Esperanza, his eight year old daughter, when he and his wife, Rosa, took the child to the general hospital.

> We were not satisfied in total. For example, we were there at 7 a.m. and it was after 12 noon when we finally saw a doctor. Actually, we saw three student doctors in less than five minutes. I guess if one of them didn't know what was wrong with Esperanza, one of the others did. They consultation cost us 50 centavos, which was good because we did not have much money. One of the student doctors gave us a prescription for medication. There was a pharmacy in the hospital that sells medicine cheaper than the private pharmacies so we took the prescription there. They said that they did not stock that particular medicine so we had to go to a private pharmacy for it.

Alfonso summed up the opinion of most informants regarding the care received at public facilities when he said, "Es cierto que hay cuidado, pero no es igual." (It's certain that you will receive care, but it is not equal care).

Attitudes Toward Traditional Practitioners. Informants reported that they usually sought the services of curas for minor conditions which they believed that curas could treat or cure as successfully as professional physicians. Curas were often visited in conjunction with professional medical services. Informants reported overall satisfaction with the services obtained from curas, but they may have held different expectations of curas than of physicians. They expected good results or a cure from physicians and were critical of physicians when they could not successfully treat a condition. They did not seem to be this critical of curas, saying, "Well, it was a serious illness; we should have gone to a

medical doctor." Informants reported satisfaction from all services received from curas. They believed the "natural" medicines given to them by the curas were better in that they were "more natural" and produced less unpleasant side effects than the medicines prescribed by professional physicians. This seemed incongruous in view of the fact that scientific medicines were purchased almost indiscriminately over-the-counter and informants self-medicated to a great extent.

Informants reported that curas nearly always gave their clients the natural medicines (in capsule form) as well as prescriptions for scientific medicines which could be purchased at a pharmacy. The giving of natural medicines by the cura or the use of sample medications by the medical physician was viewed as a positive practice because it would save money for the client.

Informants were willing to travel considerable distances to visit highly reputed curas. Sometimes the services of some curas were expensive, costing far more than physician services. Nearly all curas charged as much per consultation, if not more, than physicians. Doña Marta reported that she paid a cura Q28 to treat her bilis and then noticing the investigator's shocked face, she added, "But he gave me injections and medicine, too." She reported that the injections caused so much pain that she had to stay in bed for two days. Doña Marta was 74 years old; because of her age she may have had more faith in the practices of curas. A younger person might have shown more concern regarding the cost and the "cure." Doña Marta reported that she should have returned to the cura

after three months for another treatment. She did not return because she could not afford it.

In summarizing the data from the health histories, it is apparent that most members of the sample experienced an episode of ill health once or twice each year. For the most part, these illnesses were of a minor nature such as colds, flu and cough. They were successfully treated at home within the family setting with some form of self-care. The majority of other illnesses were also treated at home but some of them required care from outside sources.

After respiratory illness, gastro-intestinal or abdominal problems were the next most frequently experienced health problem by both adults and children, with stomach infections being more common in children. Contagious diseases were still common and a cause of serious illnesses in children.

At the time of the investigation, adult members of the sample utilized private medical care more frequently than other types of care; it was reported by members of the sample that services from a private physician were of a higher quality than professional services received at public facilities. In the previous five years, children in the sample were taken to public faciliites more frequently than to private sources of care possibly because of the frequency of the children's illnesses. Families reported that they preferred private services for their children also, but were sometimes unable to afford the cost. The reliance on private medical care illustrated the aspirations and attempts of the family to

obtain the kinds of services that they believed would best meet their needs. Sample families were confronted with a wide variety of choices for health care but limited means of obtaining these services.

The reliance of some families on public facilities for medical care implied that such families received fragmented, episodic care and that they were treated by practitioners with an incomplete knowledge of the client and the family. This was true of services received from private physicians, due in part to physician "shopping", but also to the fragmented care that was available to persons with limited economic means. No family reported having a "family doctor" and only one mother reported that she consistently took her children to the same physician. The lack of a continuous relationship between the family and the practitioner and the physician's resulting imperfect knowledge of family health were serious obstacles to the delivery of efficient medical care.

The use of curas was not an uncommon response to illness, but they were not utilized as frequently as professional physicians. The sample members reported that curas were utilized for what were viewed as "simple" illnesses and their services were seen as an alternative or as an adjunct to professional services.

Immunization Status of Children in the Sample

The Public Health Department of Quetzaltenango offered free immunizations for diptheria, pertussis and tetanus (D.P.T.), polio and rubeola. Private physicians also had the vaccines available

but informants said they charged Q6 for each injection. Four private physicians were asked by the investigator about their charge for immunizations. The cost of immunizations in private physicians' offices varied somewhat. These four physicians reported that rubeola was given for Q3 to Q8; D.P.T. cost Q2 to Q4; and the polio series was given for Q3 to Q5 for each dose.

There were thirty-six nuclear families in the sample; twenty-seven nuclear families had children under the age of twelve years. Mothers and fathers of children under the age of twelve were asked about the immunization status of their children. The immunization status of the nuclear family was recorded as complete if all children in the family, twelve years of age and younger had received completed series of immunizations for diptheria, pertussis and tetanus, polio and rubeola. The immunization status was incomplete only if the children had not been fully immunized.

Table 22 shows the immunization status of the twenty-seven families in the sample who had children twelve years of age or younger. The data show that all children in sixteen nuclear families had completed the series of immunizations for rubeola, polio, diptheria, pertussis and tetanus, while the children in eleven families did not have adequate immunization protection for these diseases.

Mothers in the eleven non-immunized families tended to give a number of reasons why their children had not been immunized. Three mothers had started immunizations for their children, but had not continued because of the time necessary to attend the

Table 22

Immunization Status of the Twenty-Seven Nuclear Families in the Sample who had Children Twelve Years of Age or Younger

Immunization Status	Number of Families
Complete	16
Incomplete	11

immunization clinic. Four mothers said that long lines at the immunization clinic necessitated at least one-half day at the clinic and they had not taken their children because they knew a long waiting period was involved. One mother reported that whenever she had the time necessary to attend the immunization clinic, her child had a cold or the flu and so they had been unable to attend the clinic. Three mothers said their children had not received immunizations because the fathers "did not believe in them." Two of these young mothers seemed rather hesitant and both asked if the investigator believed the immunizations really prevented the communicable diseases. When the answer was in the affirmative, they expressed agreement, but said their husbands objected so they had not pursued the matter. One of these fathers stated he felt that the immunizations made the children as sick as the disease itself. Another father said that he did not have confidence in immunizations; he was not certain that they really prevented the disease. The third father was a lay Pentecostal minister and believed that only God permitted life or death.

The parents of children who had been immunized were enthusiastic supporters of immunizations. They said that parents who did not have their children immunized were ignorantes and estupidos (ingorant and stupid). These parents said many people did not have their children immunized because they believed that immunizations in childhood would cause sterility when the children grew to adulthood.

One informant, a 58 year old rather formidable woman whose

children were now all adults, reported that one of her children had died eleven years ago of complications from measles. When her only grandson was born in Chimaltenango, she personally made a visit every three months to make certain that her new daughter-in-law took the child in for immunizations. The grandson now has immunizations for todos (everything).

However, having severe problems or death occur from communicable diseases did not necessarily mean that parents would have their children immunized. Roberto (the two year old polio victim) and his two sisters remained without immunizations. The mother said that she believed in them, she just has not had the time necessary to take the children into the clinic. However, during the last year she took Roberto to El Centro de Polio every fifteen to thirty days, necessitating an all-day excursion by bus to the capital city.

The Pentecostal minister and his wife experienced the death of a daughter from complications of measles and pertussis. Their four little boys were not immunized. In this case, their strong religious beliefs were such that they have encouraged a fatalistic attitude toward disease and death. They believed that if God willed the death of a child, immunizations would not prevent or thwart God's will. Only God was capable of determining life or death.

All things considered, the fact that sixteen out of twenty-seven families have immunized children should be considered a positive factor. It reflected the success of the government's efforts

to support and encourage immunizations and other child health programs. At the same time, clinic services at the public health department might be altered in such a manner to permit easier access to care. Health education programs regarding immunizations have been successful and should be continued; they could be directed towards fathers as well as mothers since the limited information available here indicated that most women were convinced of the benefit of immunizations but some men still resisted immunizations for their children. Peer pressure was strong against those parents who either had not immunized their children or did not believe in immunizations. Word-of-mouth and this type of peer pressure undoubtedly will be a significant factor in further immunization success.

Health Status of the Sample

Each member of the sample was asked to rate his or her health status as good, fair, or poor. Parents were asked to rate the health status of their children under age fourteen years. Table 23 shows the self-rating of health status for 134 members of the sample. As can be seen from Table 23, 116 persons or 86.6 percent of the sample rated their health as good. Fourteen persons, or 10.5 percent, rated their health as fair while four persons, or 2.9 percent rated their health as poor.

Children under the age of fourteen years who were rated in poor health tended to be those children with frequent respiratory conditions, parasitic diseases and fevers. The three persons in

Table 23

Self-Rating of Health Status for Members of the Sample

Number of Persons	Age	Rating		
		Good	Fair	Poor
31	0-5 years	27	4	
26	6-14 years	25	1	
7	15-19 years	7		
35	20-29 years	30	1	2
19	30-49 years	16	2	1
16	50 or more years	9	6	1
Total 134 persons		116 (86.6%)	14 (10.5%)	4 (2.9%)

the middle-age groups, ages 20 to 49 and who rated their health as fair were all women with various complaints of tiredness, backaches, headaches, stomach problems, heart problems, nervousness and numerous "female" problems. Those six persons over age forty who rated their health as fair tended to have chronic health problems such as stomach or liver problems. Persons who rated their health as poor had all experienced a major health crisis in the past year, such as acute abdominal pain, diabetes, and liver problems. The three oldest members of the sample, a seventy-four year old woman, an eighty-year old man and a ninety-two year old woman all rated their health as good. The investigator's opinion was that the self-ratings of health status by individuals within the sample reflected a realistic appraisal of their levels of health. Those who rated their health status as good had fewer illness symptoms and were able to participate fully in all activities of daily living. Those who rated their health as poor experienced numerous illness or chronic diseases to the extent that illness interfered with work and family activities.

A General View of Health and Illness

Every human community has developed an elaborate set of ideas, attitudes and modes of behavior in response to the problems of social living that assist them to maintain health and to cope with illness. The decisions that the people of San Marcos made in maintaining health and in dealing with illness were in a real way influenced by the particular conditions in which they lived.

In order to understand dimensions of illness it is necessary to understand in a general way what the people of San Marcos believed to be their major health concerns and their conceptions of how different agents and forces interacted to create illness. Respondents in the sample were asked in the Health History Interview and in the Health Beliefs and Practices Interview to discuss specific illnesses and related health behavior. They were later asked to discuss health conditions in more general terms focusing on the overall population of the colonia rather than on themselves as individuals.

The people of the colonia said that the major health problem in the colonia was the lack of adequate sanitation. There was no drainage system in the colonia; sewage, garbage, and other refuse drained alongside of the roads and footpaths. During the rainy season there was no way to avoid the drainage as it flowed over the surface of the roads and paths. None of the streets were asphalted; children were constantly playing outside in the streets. Like children everywhere, they played in the dirt and it soon covered their hands and faces. People believed this was the reason why children so frequently had parasitic diseases; they played in the dirt and then put their hands in their mouths or did not wash their hands carefully before eating. The sample believed that the high incidence of impetigo could be traced to the unsanitary environment. Microbios (germs) were present in the soil and when children played in the streets they were likely to come in contact with the microorganisms. Within a few days they would develop impetigo

which could then be transmitted further by direct contact with the infected child. It was believed that the soil served as a repository for organisms that caused respiratory diseases. The sample members said that it was best not to kick up the dust while walking along the road; they attempted to keep children indoors if the wind was blowing. The residents of the colonia said that occasionally the drinking water was contaminated. Because outdoor privies were common and flooding occurred frequently during the rainy season, most people boiled their water before drinking it.

A second health problem identified by the residents of the colonia was desnutricion (malnutrition). They believed that malnutrition was directly related to the material conditions of life. They stated that because the people were poor, they were unable to buy sufficient amounts of the right food. Most sample members were clearly able to identify nutritious foods. They stated that eggs, vegetables, fruits and meats were foods that would make a person healthy. Tortillas and coffee were the morning and evening meals of the poor and were not considered nutritious, only "filling."

The third most commonly identified health problem was that of la gripe (the flu), which consisted of fever, headache, and generalized aches and pains. The frequency of its occurrence was attributed to the changes in climate; it reportedly occurred more frequently at the beginning and end of the rainy season. A person could leave his house at mid-day and the weather would be pleasant and very warm until it began to rain in the late afternoon,

afterwards it was cold and damp. The people of the colonia believed it was easy to be susceptible to the microorganisms that caused la gripe when the body was warm and dry and then the temperature changed rapidly to wet and cold.

This generalized view of health and illness involved the relationship of people to the environment. Specific factors in the environment such as microorganisms and climate were believed to be important in maintaining health and preventing disease. However, respondents also were able to articulate an association between illness and material conditions of life. Such statements as, "if the municipalidad would provide good drinking water and a sewage system, we would not have so many illnesses" were common. Many said, "You cannot eat the proper foods if you do not have the money to buy them." There was a general feeling that because the residents of the colonia were poor and had little political influence, the city government effectively ignored the needs of the colonia, and provided services to other sections of the city where "rich" people lived.

These beliefs demonstrated the increasing sophistication of this sample of urban poor. While their understanding of infectious diseases and malnutrition reflected an adherence to scientific medical explanations, they indicated an awareness that features of inequality and exclusion in the relations of the colonia with the larger society reflected institutional denial of genuine opportunities for the maintenance of health and prevention of disease.

Summary and Conclusions

The data presented in this chapter have yielded a body of knowledge that was used to explain the occurrence of illness and to evaluate the potential consequences. The data indicated that this shared body of knowledge influenced decisions regarding treatment and prevention of illness and the types of health services that were obtained by ill sample members.

Explanation of Common Illness Manifestations

The Health Beliefs and Practices Interview yielded data regarding the beliefs surrounding causation, treatment and the prevention of 13 common illness conditions. Ascribed causation was divided into two categories, external and internal. External agents such as the cold air, the rain, the sun and the wind were commonly believed to be sources of excess heat, cold, or a "force" that may enter the body, upset its normal balance, and cause illness. Internal causation of illness was further subdivided into those conditions that influenced the individual's psychophysical state such as the concepts of hot-cold and strong-weak conditions involving intense emotional states.

Hot and cold qualities, which have been historically attributed to Spanish classical medicine were by far the most common conditions believed to influence health and illness in this population. Excesses of either cold or heat were considered dangerous, especially cold. Illnesses tended to be attributed to cold much

more frequently than heat, perhaps due to Quetzaltenango's predominantly cool, damp climate. Illnesses such as headaches, crying, sadness, weakness, lack of appetite and stomach pain were associated with strong emotional experiences. Chest pain, cough, colds, sore throat, and fever were related to both external and internal conditions of hot and cold and to external climatic conditions such as wind or dust. Vomiting was associated with eating contaminated foods, eating or drinking too much or other internally ascribed factors such as pregnancy and car sickness. Leg pain was associated with the cold but was more commonly attributed to walking or running in excess or trauma.

Treatment and Prevention of the Illness Mnaifestations

The concepts of hot-cold and strong-weak that underlaid ascribed causation were important considerations in the treatment of the illness manifestations. Illnesses believed to be caused by either becoming too hot or too cold were treated with home remedies that were believed to contain the opposite qualities. Pharmaceutical preparations were purchased frequently to aid in the treatment of illness, however their efficacy, rather than innate qualities of hot and cold, seemed to be more important to sample members. Psychological states of illness such as crying and sadness were thought to be outside the realm of medical treatment. Acceptance and resignation to life's problmes were thought to be important in resolving emotional crisis. Distractions or diver-

sions were believed helpful in focusing the sufferer's attention elsewhere. A number of respondents felt that talking about problems with other persons was helpful. It was reported that most illnesses were treated at home. The administration of various home remedies were reported frequently by the sample. Medical advice was obtained if the condition worsened or if it persisted for a long period of time.

Preventive practices were based on the ascribed causation or the explanation of the illness manifestations. The sample reported that they routinely maintained an awareness of external environment hazards as they went about their daily activities, and they avoided agents such as rain, the cold, the heat, the night air, and the wind if possible. Strong emotional states were to be avoided and personal behavior such as avoiding the consumption of too many hot or cold foods, wearing protective clothing and not getting chilled or wet were reported to be important preventive behaviors. Good nutrition, fresh air, exercise, and proper amounts of sleep were believed to be important also.

Respondents to the Health Belief and Practice Interview were asked to rank order the illness manifestations from the most serious to the least serious. Fever, stomach pain, and weakness were perceived as the most serious conditions as they were believed to be fatal on occasion and could lead to other serious conditions. These illness conditions did not always respond to home remedies and therefore needed medical intervention for recovery. Colds and leg pain were seen as the least serious illnesses because they lasted

only a few days, usually did not lead to more serious illnesses and could be adequately treated in the home environment.

Traditional Illnesses

The sample households were asked to describe common traditional diseases and their treatment. Lombrices, susto, bilis, empacho and el ojo were the conditions most frequently mentioned by the sample. It was evident that traditional diseases were still a part of the health belief system in San Marcos. The data indicate that traditional diseases occurred primarily in children and older women and that they are treatable by various home remedies. If the symptoms of traditional diseases were perceived as serious, the services of a cura or a physician would be obtained.

Past Illness Experiences

The sample were asked to discuss their health problems in generalized terms. They reported that inadequate sanitation, malnutrition and the flu were their major health concerns. This generalized view of health and illness revealed culturally relative beliefs regarding the relationship between the residents of the colonia and the environment. The belief in the concepts of hot and cold were again in evidence as was the understanding of the relationship between microorganisms and disease. Respondents reported that general health problems in the colonia (inadequate sanitation and malnutrition) were, in the final analysis, related to the material conditions of life experienced by the colonia residents.

The health histories of the sample revealed that 95.5 percent

of all households reported an illness for one or more household members during a recent six month period. Symptoms were reported for 83.6 percent of all children, 41.9 percent of all adult males, and 52.4 percent of all adult females. Care from private physicians was the type of care most frequently utilized, followed by professional care in public facilities and lay practitioners. Respiratory conditions and gastro-intestinal and abdominal problems were the categories of illnesses most frequently reported by adults. Children suffered most frequently from respiratory conditions, gastro-intestinal symptoms and contagious diseases.

The health histories indicated that most illness conditions were treated successfully at home. The administration of home remedies often continued concurrently with services obtained from health care specialists. Respondents reported that they would prefer to seek care from a private physician, but the cost of care often forced them to seek medical services in public facilities. Curas were often seen as an alternative or in conjunction with professional physician services. The cost of the care obtained from curas and physicians was approximately the same, although several sample members reported a higher fee for traditional services. The data indicated that there are a number of treatment alternatives for any one given illness.

Some understanding of preventive health practices can be ascertained from the immunization status of sample families. Twenty-seven nuclear families in the sample had children under the age of 12 years. In 16 of these nuclear families all children had

completed immunizations for polio, rubeola, diptheria, pertussis, and tetanus. Mothers in the sample expressed more confidence in immunizations than did fathers.

Members of the sample were asked to rate their health status as good, fair, or poor. Eighty-six percent of the sample believed their health was good; 10.5 percent rated their health as fair and 2.9 percent rated their health as poor.

The data indicate that the sample members had a body of knowledge that relates specifically to health and illness. This knowledge was applied in evaluating illness and to the process whereby decisions about treatments are made. The data revealed how knowledge regarding health and illness related to purposive behavior by reflecting the shared standards or rules by which people solve health problems and select courses of action. The data revealed that there are several major treatment alternatives, including self treatment, that represent the options available to the sample when illness occurs.

CHAPTER VI

ANALYSIS OF ILLNESS EXPERIENCES AND TREATMENT ALTERNATIVES

In the previous chapter a body of culturally relevant knowledge regarding illness beliefs and reported health practices was described. The data illustrated beliefs and actions that reportedly occurred during typical illness experiences. It was suggested that beliefs about the causation of illness influenced actions that were related to the prevention and treatment of illness.

On the basis of data previously presented, it is suggested that the recognition of illness, it's definition, and the responses associated with it are variable, highly complex, and interrelated. The evaluation of any illness is subject to personal interpretations that are influenced by cultural traditions and social reality. These interpretations form the basis for subsequent actions that influence health-illness states.

The data presented in this chapter follow the same line of investigation. Illness episodes that were reported by sample members during a one-month (four week) period are described. The line of investigation was extended to include data concerning the alternative patterns utilized by the sample to manage illness episodes including institutional arrangements and individual decisions that

determined what was actually done about illness.

Members of the sample described their illness symptoms, what actions they initiated, and where they went for advice, assistance, and treatment. Those persons who were ill were asked to describe changes that occurred in their daily activities as a result of illness. The sample described the care given in the home and by physicians and indigenous practitioners. Ill persons were interviewed regarding the care they received in order to describe the management of illness and alternatives for treatment available within the cultural context.

Illness Episodes

Information was obtained about illness episodes by use of the Family Health Calendar Recording (See Appendix E). All twenty-two households consisting of 132 individuals reported the names of persons experiencing illness, symptoms encountered, treatments or remedies used, and the person who suggested the therapy.[1] Respondents to the Family Health Calendar (FHC), were asked to describe the symptoms in their own words and parents were asked to describe the illnesses that occurred in children under eighteen years of age. All twenty-two households, or 100 percent of the sample households, reported illness incidents during the four week period of the FHC. Table 24 shows that 135 incidents were reported and the average per household was 6.2 illnesses.

---

[1]At the time of the Family Health Calendar two members of the sample had moved from the area and were lost to further study.

Table 24

Frequency and Distribution of Family Members[a] Reporting Illness Incidents[b]

Numbers	Sample Members					
	Women		Men		Children[c]	
	N	%	N	%	N	%
Total Respondents	31	23.5	41	31.1	60	45.4
Persons Reporting Illness	24	77.4	10	24.3	26	43.3
Incidents of Illness	54	40.0	14	10.4	67	49.6

[a]N = 132

[b]N = 135

[c]All persons below the age of eighteen years.

Three-fourths of the women (77.4 percent), one-fourth of the men (24.3 percent) and less than half (43.3 percent) of the children reported illness incidents. One explanation for such a high percentage of women reporting illness symptoms may be the cultural traditions found in Latin societies which prescribe a limited expressive role for women. The ideal woman does not express emotion freely; she is stoic and suffers in silence, thus physical symptoms of illness may be a socially approved manner for women to receive attention and concern from others. Men are influenced by the machismo tradition; men are viewed as "strong" whereas women are "weak". It has been previously suggested that men find outlets for emotional tensions through fighting, spouse abuse and drinking. Since practices are not socially sanctioned for women they may express emotional stresses through frequent illnesses.

Types of Illness

A more detailed view of illness experiences can be obtained by analyzing the symptoms by category. For this purpose, the symptoms as described by informants in general symptomatic terms were classified in broad categories. Respiratory, gastro-intestinal and abdominal symptoms and problems of the lower extremities were easily identified on the basis of the information supplied; the category of "other" was added to include miscellaneous symptoms that could not be included in other categories. The category of emotional problems presented some difficulties as a number of symptoms shown in this category could be included in other categories.

For example, stomach ache could reasonably be included in the category of gastro-intestinal and abdominal disorders. All symptoms shown in the category of emotional difficulties were placed there on the basis of information supplied by the respondents to the FHC.

Table 25 shows that the families reported 135 identifiable symptoms; the most frequent were related to respiratory ailments (36.3 percent) and gastro-intestinal and abdominal complaints (23.0 percent), which together accounted for nearly 60 percent of all symptoms reported.

Table 26 shows that children were reported to experience more incidents of both respiratory and gastro-intestinal symptoms than were adults. Women experienced more problems of the lower extremities, in part because two women in the sample were pregnant and complained of leg cramps. Women reported more headaches, respiratory and gastro-intestinal and abdominal symptoms than men.

Only one family reported one chronically ill family member who was hospitalized with diabetes and a resulting leg infection for five months during the time of the study. Two rather serious gastro-intestinal illnesses occurred during the four week period necessitating medical intervention. Severe abusive drinking behavior was reported on the part of four men during the four week data collection period. This was not identified by the involved individuals or their families as an illness; however, the worry, depression and anxiety that resulted in other household members as a result of the drinking episodes were reported as illnesses by other members of

Table 25

Symptoms of Illness[a] Reported by the Sample[b] During a One Month Period

Symptoms by Category	Frequency Reported	
	Number	Percentage
Respiratory	49	36.3
Colds	20	14.8
Cough	21	15.6
Flu	7	5.2
Sore throat	1	.7
Gastro-intestinal and Abdominal	31	23.0
Stomach pain	16	11.9
Vomiting	5	3.7
Diarrhea	7	5.2
Nausea	3	2.2
Emotional	14	10.3
Cólera (headache, stomach ache, and vomiting)	1	.7
Worry, anxiety	2	1.5
Anger	1	.7
Upset, crying	1	.7
Depression	1	.7
Stomach ache	1	.7
Headache	7	5.2
Problems of Lower Extremities	9	6.6
Leg or foot pain	2	1.5
Leg or foot infection	2	1.5
Rheumatism	1	.7
Leg cramps	4	2.9
Headaches (non-emotional)	5	3.7

Table 25 Continued

Symptoms by Category	Frequency Reported	
	Number	Percentage
Other	27	20.0
Low back pain	7	5.2
Fever	4	2.9
Eye infection	3	2.2
Tiredness	3	2.2
Nose bleeds	2	1.5
Allergy	2	1.5
Toothache	1	.7
Impetigo	1	.7
Chest pain	1	.7
Lack of appetite	1	.7
Deafness	1	.7
Trauma from spouse abuse	1	.7

[a]N = 135

[b]N = 132

Table 26

Symptoms of Illness[a] Reported by Men, Women and Children[b]

Symptoms by Category	Men N	Women N	Children N
Respiratory	5	9	35
Gastro-intestinal and abdominal conditions	3	9	19
Emotional	1	13	
Problems of lower extremities		7	2
Headaches (non-emotional)		4	1
Other	4	11	12
Total	13	53	69

[a] N = 135

[b] N = 132

the household.

An interesting finding was that emotional difficulties accounted for 10.3 percent of all symptoms reported by the sample (Table 25). As previously mentioned, emotionally derived illnesses were classified on the basis of the information supplied by the respondents. All emotional upsets, except the one case of anger were reported as occurring in women. The one case of anger in a male was reported by the man's wife, mother and sister who complained that he was angry, abusive and causing family disturbances. As a result of his behavior they were experiencing physical abuse, headaches, stomach aches, and depression. It is possible that this man would not have self-reported his anger as a symptom of illness.

The high incidence of emotionally attributed illnesses in the female sample members indicated that women during this four week period tended to experience emotional difficulties more frequently than men. Cultural patterns of male-female behavior permitted men to express freely their emotions whereas women were supposed to be submissive and non-assertive. A possible explanation is that adherence to their culturally prescribed role was more likely to cause emotional difficulties in women that resulted in both emotionally and physiologically based illness responses.

Sontag (1978) discussed the use of illness as a metaphor. Her point is that illness is not a metaphor, and that the most truthful way of regarding illness, and the healthiest way of being ill, is to resist such metaphoric thinking. She states:

> Illnesses have always been used as metaphors to

> enliven charges that a society was corrupt or unjust. Illness metaphors are used to propose new, critical standards of individual health and to express a sense of dissatisfaction with society as such. Modern metaphors suggest a profound disequilibrium between individuals and society, with society conceived as the individual's adversary. Disease metaphors are used to judge society not as out of balance but as repressive (pp. 72-73).

The belief that strong emotional states caused illness was incorporated into Mayan health belief systems from Spanish classical medicine during a period of repressive and harsh colonialism. Classical medicine also advanced the medical (and political) idea of balance. Illness came from imbalance and treatment was aimed at restoring the correct balance in the individual, as society, by definition, never had the disease.

Strong emotions, such as anger, envy, jealousy, etc., lead to aggressive or assertive actions which were not tolerated in colonial situations. History and circumstances have imposed a remarkable degree of stoicism on the Guatemalan Indians. This stoicism was in part a response to uncontrollable events and was a way that people managed to endure conditions while trying to rise above them.

The nominally poor Indian women in the sample were among the most powerless segment of the society. Not only did they suffer from both class and caste discrimination, but they contended with sexual inequality as well. The modern metaphors which assigned emotional problems or states to women were punitive uses of illness as metaphor. Women were believed to be quintessentially vulnerable

and full of self-destructive whims, irrational behavior, innate weaknesses and were not to be trusted. The notion that illness expressed the character was invariably extended to assert that the character caused the disease. This analysis assumes, of course, that illness patterns were typically depicted in this four week recording of all illness symptoms. Ethnographic and other information obtained from informants tended to support this analysis.

Duration of Illness

Duration of illnesses varied somewhat depending on the severity and chronicity of the complaint. The duration of average respiratory illness was 3.6 days; gastro-intestinal and abdominal disorders occurred over an average of 2.3 days. Emotional upsets lasted an average of 1.3 days, while headaches averaged only one day or less. Problems of the lower extremities occurred over an average of 5.7 days; this category contained the illness symptom (a leg ulcer resulting from diabetes) with the longest duration reported in the four week period. The conditions in the category of other varied in duration; most averaged approximately 2 days with the exception of nosebleeds which occurred within a brief time span.

Interpretation of Symptoms

The primary concern in this portion of the research was not so much "What the people think" as "What they do", and how it is rationalized when illness occurs. To find answers to such questions, multiple cases of illnesses were documented during the course of the investigation and the application of the FHC.

Table 27, cases 1-6 represents a reconstruction of six of the illness episodes which occurred during the FHC. The left column of the episode indicates symptoms, problems and diagnosis identified by the ill person, his family or health care specialist. These are frequently multiple, separated by asterisks, reflecting different levels of conceptualization and labeling as well as alternative sources of information. Direct quotations of labels have been used whenever possible. The middle column describes the therapeutic action that was taken by the patient, family or health care specialist. The right side of the column indicates the rationale for the therapeutic action. At the top of the episode is the individual's and/or family's rationale or explanation for the disease.

The first five case episodes were chosen by the investigator because they appeared typical of the illnesses that occurred during the FHC. The sixth case was the most serious illness episode that occurred during the same period.

The interpretation of illness symptoms began with the realization that something was wrong. Adults reported that in the beginning stage of an illness they were first aware of a sense of not feeling well or a physical symptom that was abnormal or different than what they usually experienced. Parents reported that they recognized illness in young children by changes in behavior or by the advent of physical symptoms that were observable such as swelling, redness or rash. The recognition of illness always involved reliance on common sense conceptions of what was normal and what

Table 27

Case Studies on Illness Symptoms, Therapeutic Action and Rationale

Case 1: Celia, age 32 years

Illness Explanation: Infected area on right foot. Might have had a fungus infection. I scratched it and broke it open.

	Symptoms	Therapeutic Action	Rationale
Day 1	Swelling		
	Redness	Observation	Didn't know what was wrong
	Some pain		
Day 2	More pain	Observation	
	Redness	Scratching	
	Inflammation	Washed area well with soap and water	Keeping it clean prevents spread of inflammation
	Swelling		
	Itching		
Day 3	Pain	Worry/preoccupation	Infections can be very dangerous
	Oozing	Antibiotic salve	Will cure the infection
	Skin breakdown	Wearing sandals	Prevent further irritation

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 4	Pain	Resting	Walking causes more swelling
	Oozing	Washing	To disinfect the area
	Skin breakdown	Staying in the house	To avoid dust and contamination from the street.
Day 5	Pain Infection	Visited a physician who prescribed an ointment and capsules (antibiotics).	It was getting worse; nothing that I did seemed to help. I wanted to avoid any complications Antibiotics and ointments will "cure" infections.
Day 6	Drying Less pain	Taking capsules and antibiotics	Se cura (the medicine is curing it).
		Wearing sandals and stockings	Avoid irritation For protection and cleanliness
Day 7	Almost healed	Taking antibiotics Using ointment	For curing Avoid irritation
	Dry	Wearing sandals and stockings	For protection and cleanliness
	Looks good		
	No redness or swelling		

Table 27 Continued

Case 2: Maria, age 3 years

Explanation of Illness: Stomach infection

	Symptoms	Therapeutic Action	Rationale
Day 1	Vomiting	Alka Seltzer with lemon juice	To calm the stomach and stop the vomiting
	Diarrhea	Herbal drinks (water with pericon and salvia santa) Tea de Maria Luisa	To stop the diarrhea
	Doesn't want to eat or play Sleeps more Crying and irritable	Hold her more	Makes her feel better
		Purgative	To clean out the stomach
		Toma (drink) for Lombrices (parasites).	"Simple" vomiting and diarrhea usually only lasts one day. Must have Lombrices. The toma se envuelen (wraps up) the Lombrices (See discussion of traditional health beliefs regarding Lombrices in Chapter 5.

Table 27 Continued

Case 3: Jose, age 58 years

Explanation of Illness: The kidneys and also too much work (He is a construction worker and has to lift and carry heavy objects).

	Symptoms	Therapeutic Action	Rationale
Day 1	Pain in lower back	Linaments and massage	To help the pain
		Massage with alcohol	Is a "cold" substance
Day 2	Pain in lower back	Went to pharmacy and explained symptoms. They gave him medicine for "kidneys"	Does not have money for a physician and does not like the public clinics because "you have to wait too long."
			The medicine will disinflamar (decreases the infection) in the kidneys
		"Cold" foods and liquids: a drink made from the corn silk and vanilla. "Cold" foods such as vegetables and salads	Inflammation is a "hot" condition
		Avoid foods with grease	Greasy foods are "hot"
		Avoid foods with sugar and salt	They affect the kidneys

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 2		Continues to go to work despite wife's objections.	Will lose job if he does not go to work
		Linaments and massage	For the pain
Days 3-5	Pain	Medicine	Will cure the inflammation
		Massage	For the pain
Days 6-7	Pain in lower back	Medicine	Will work against inflammation
		Massage	For the pain
		Special "cold" foods	Will help the inflammation

Case 4: Juana, age 48 years

Explanation of Illness: Coléra because my son is drinking and causing problems in the home.

	Symptoms	Therapeutic Action	Rationale
Day 1	Headache Crying Dolar de corazon (heartache)	Drank a soda antibiliosa (similar to Alka Seltzer) purchased from the pharmacy	It makes my head feel better, but nothing can help el dolar de corazon except for Roberto to stop drinking

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 2	Worry Preoccupation Stomach pain Vomiting	Soda antibiliosa	Makes me feel a little better
Day 3	Worry Preoccupation Sadness	There is nothing I can do except pray	Only God can help
Day 4	Worry	Prayer	It is in the hands of God

Case 5: Jorge age 4 years

Explanation of Illness: Cough and cold from the cold, and the changes in climate from wet to dry season. Also he ate 3 ice cream cones yesterday.

	Symptoms	Therapeutic Action	Rationale
Day 1	Irritable	Held him a lot	Seemed to make him feel more content
	Cough	Hot chocolate with butter	It is a "hot" drink: warms the inside of the body and cuts the cough

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 2	A lot of mucous	Hot herbal teas	Warms the body
	A little cough	Alcohol sponge	Brings the temperature down
	A little temperature	Fluids	For the fever
		A cold medicine griponse from the pharmacy	Cures colds
		Extra sleep	Body needs extra rest
Day 3	Mucous		
	A little cough	Warm drinks	Treat "cold illness" with "hot" foods and drinks. They warm the body.
		Griponse	For the cold

Case 6: Libertad, age 6 years

Explanation of Illness: We didn't know what was wrong. She kept complaining and crying with a stomach ache. The cura said she had a large empacho.

	Symptoms	Therapeutic Action	Rationale
Day 1-2	Cough		
	Cold		
	Stomach pain	Last week the child	

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 1 - 2		was taken by parents to a *cura* who lived 60 miles away. He diagnosed *empacho* and prescribed the following *toma* (drink) three times per day: Stem of garlic Stem of onion *Enciensio* (herb) Vanilla Lemon Coconut seed Sugar	
		Child was given a small glass full three times each day.	*Curas* know the cure for *empacho*.
		Stayed in bed	Extra rest helps the body recover more quickly.
Day 3-4	Cough Cold Stomach ache Diarrhea Lack of appetite	Given *toma* prescribed by *cura*.	Parents are very worried. The *cura* is well-known. He has a large practice so must be very good. He was recommended by an uncle and parents have a great deal of confidence in the uncle's judgment.

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 5	Cough Cold Diarrhea Stomach pain	Parents took child to a public clinic. The physician said she had lombrices and prescribed medicine for two days	Very worried, conditions seem to be worsening. Toma from the cura is not helping her
Days 6-7	Still some pain in stomach	Medicine for lombrices	Medicine from the physician is helping her
Day 8	Stomach pain	Home remedy consisting of herbs and water	Have tried everything else, don't know what other thing to do
Day 9	Stomach pain Diarrhea	Went to pharmacy and purchased medicine for diarrhea after consultation with pharmacist Continued with home remedy	Don't know what else to do. Treating symptoms of stomach pain and diarrhea
Day 10	Stomach pain No appetite	Cooking oil	To clean out the stomach and stop the diarrhea
Day 11	Stomach pain Diarrhea	Liquids only	They are better for upset stomach and diarrhea,

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 11	Decaido (crest-fallen, sad)		because they are light
Day 12	Stomach pain Cough Cold	Returned to see physician at clinic	Physician told them nothing about the stomach pain
		Prescribed a tonic and a cough medicine	Will make her stronger and control cough
Day 13-14	Stomach pain Vomiting	Taking medications as prescribed	Don't feel as if the doctor is helping her, but don't know what else to do
Day 15	A little better	Went to pharmacy and purchased another bottle of tonic	Unable to afford visit to physician. Tonic is making her stronger and helping her to feel better
Day 16-20	Improving	Continuing with tonic	The tonic is slowly helping her
Day 21	Cough Cold	Cough medicine prescribed by physician and toma prescribed by cura	They helped the cough and cold before when she took them

Table 27 Continued

	Symptoms	Therapeutic Action	Rationale
Day 22	Severe cold Cough	Family took her to espiritualista who prescribed a cough medicine (to be purchased in the pharmacy)	Didn't want her to start getting very ill again. She has already seen a physician and cura and she is still not well
		Did not purchase cough medicine prescribed by cura	Already had cough medicine from the physician
		Administered cough medicine prescribed by physician	It stopped the cough before
		Calientes (warm drinks)	To warm the body
Day 23-28	Cough Cold	Calientes	To warm the body when it has a "cold" illness
		Cough medicine from Physician	To stop the cough

was not.

The first stage in the process of illness interpretation was the evaluation of the situation in light of the knowledge or understanding available to the individual. This allowed for the initial identification of what was happening and for alternative courses of action---doing nothing, self-medication, a home remedy or visiting a cura or a physician. The process of identification did not always produce a diagnosis or even a recognition of that was going on. For example, it could have been that the indentification was one of ignorance. An individual did not know or understand what was happening to him, however, this still provided the basis for some kind of action.

The second step in the process involved decision making for what were considered appropriate actions. Sometimes actions included only continued observation by the individual or involved direct intervention such as self-medication, certain prescribed behaviors, consultation, and further interpretation and clarification from family, significant others, or health care specialists. This was followed by the third step in the process which was some form of prescribed treatment. Unsuccessful results lead to the repetition of the process to reinterpret the symptoms.

Prescribed illness behaviors were the outcome of continuing efforts on the part of the ill individual and those with whom he associated to make sense out of what was happening in the light of knowledge, resources and choices available to them. The meaning of events of illness was not homogenous for everyone because inter-

pretations, decisions and actions differed, however, a general pattern of evaluation, decision-making and treatment was evident in the multiepisodic character of the illness cases presented.

The actions documented in each illness episode indicated a systematic and rational method of coping with illnesses. The system of coping was a composite of Classical medicine from an earlier age, indigenous folklore regarding the natural world and modern scientific medicine. It was a pluralistic system which has both logic and coherence and served to make sense out of what was happening to individuals who were experiencing illness symptoms.

An important factor that underlaid the evaluation of illness symptoms was the degree of threat posed by the symptoms. This notion of danger was intertwined with the meaning of symptoms and their implications for the sick individual. This factor of danger or threat was related to any symptom perceived as a result of an infection. Infectious diseases, be they an infected area on a foot or an infected throat were viewed as potentially fatal and any symptom of infection such as fever, redness, or inflammation, was viewed as cause for alarm and precipitated prompt action, usually the seeking of a physician's services.

Another aspect of danger was fear of the unknown. If an individual or his family were unable to "label" what was occurring, this was cause for consternation and worry. This anxiety and uncertainty was compounded if the physician failed to explain the patient's symptoms or disclose a diagnosis. Curas usually wrote a diagnosis (or a number of diagnoses) on a slip of paper and gave

the paper to their patients. This paper could later be shown to family and friends when discussing the illness and prescribed treatment.

The Cultural Context of Illness

The data indicated that the nature of a person's daily activities, life styles and role performance could change during an illness episode. Decisions about what to do when ill, tended to be based on beliefs and understanding of illness symptoms, the nature of the social environment, the perceived etiology and alternative resources that were available for care. Behavioral changes that occurred in response to illness revealed the organized actions taken by the ill person and his family to counteract an illness.

Knowledge about the body and perceptions of what was happening when illness was identified were conveyed to others through language and actions. They drew attention to and sanctioned appropriate models of behavior not only for the ill person but for others who shared his immediate social environment.

Tables 28, 29 and 30 contain data obtained from interviews with persons experiencing the 135 illness symptoms and their families during the one month period of the FHC. Table 28 shows that most ill persons and their families perceived the ill person as being slightly ill. The response of the family was either no response or little concern. When persons' conditions were perceived as ill or very ill, families reported they were worried or very worried. The variability in the perceived severity of the illness

Table 28

Symptoms of Illness, Perceived Severity and Response of the Family During a One-month Period in the Sample

	Perceived Severity of Illness				Response of the Family					
Symptoms and Numbers by Category	1	2	3	4	1	2	3	4	5	6
Respiratory (49)	46	1	2	0	0	27	21	1	0	0
Gastro-intestinal (31)	24	5	2	0	0	12	13	6	0	0
Emotional (14)	13	1	0	0	8	2	1	0	3	1
Problems of the lower extremities (9)	9	0	0	0	4	4	0	0	0	0
Headaches (5)	5	0	0	0	2	3	0	0	0	0
Other (27)	23	2	2	0	1	7	15	2	1	1

Note. Rating Scale: Perceived Severity of Illness. 1 = a little ill; 2 = ill; 3 = very ill; 4 = seriously ill. Rating Scale: Response of the Family. 1 = No response; 2 = A little worried; 3 = Worried; 4 = Very worried; 5 = Ashamed; 6 = Anger.

Table 29

Symptoms of Illness and Changes in Conduct During a One-Month Period in the Sample

	Respiratory		Gastro-intestinal		Emotional		Problems of Lower Extremities		Headaches		Other	
All Persons	(N=49)		(N=31)		(N=14)		(N=9)		(N=5)		(N=27)	
Changes in Conduct	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Uncomfortable	11	37	20	11	14	0	9	0	5	0	14	14
Pain	3	46	26	5	7	7	9	0	5	0	18	9
Stayed in bed	0	49	3	28	1	13	0	9	0	5	0	27
Restlessness	6	43	19	12	5	9	5	4	1	4	4	23
Lack of Appetite	6	43	27	4	12	2	1	8	2	3	3	24
Irritable	16	33	21	10	12	2	5	4	3	2	8	19
Quiet, not talking	3	46	25	6	10	4	3	6	4	1	20	7
Wanted to sleep	6	43	26	5	1	13	0	9	2	3	11	16

Table 30

Symptoms of Illness and Changes in Conduct During a One-Month Period

in Adults and Children in the Sample

Changes in Conduct	Respiratory		Gastro-intestinal		Emotional		Problems of lower extremities		Headaches		Other	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Children	N=35		N=19		N=0		N=2		N=1		N=12	
No desire to play	5	30	13	6			1	1	0	1	1	11
Cried a lot	10	25	14	5			1	1	0	1	2	10
Not sleeping well	15	20	15	4			1	1	0	1	2	10
Stayed at home	12	23	11	8			1	1	0	1	1	11

Table 30 Continued

Changes in Conduct	Respiratory		Gastro-intestinal		Emotional		Problems of lower extremities		Headaches		Other	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Adults	N=14		N=12		N=14		N=7		N=4		N=15	
Fulfilled mother or father role	14	0	12	0	14	0	7	0	4	0	14	1
Able to work outside of home	14	0	11	1	14	0	7	0	4	0	13	2
Able to perform work at home	14	0	12	0	0	14	7	0	4	0	4	1
Able to continue recreational activities	11	3	3	9	13	1	6	1	3	1	7	8

and the response of the family depended upon the threat posed by the symptom and the duration of the illness. Families became more worried if the symptom persisted, did not respond to treatment, or if they perceived the symptom to be potentially dangerous.

Emotionally based illnesses and spouse abuse precipitated shame and anger in family members. Emotionally derived conditions were not perceived as serious and elicited little or no worry by the family. Problems of the lower extremities and headaches were perceived also as non-threatening conditions and prompted either no response or little concern on the part of the family. In the category of other symptoms, the illness conditions of fever, low back pain and lack of appetite were perceived as the more severe illnesses and families reported a higher degree of concern. These illnesses produced more changes in conduct than were reported for the other illness symptoms in this category (See Table 30).

Table 29 shows that most persons who experienced respiratory illness symptoms were not uncomfortable and did not experience pain. No ill person reporting respiratory illness symptoms remained in bed; six persons reported restlessness, especially at night, and six persons complained of decreased appetite. Six persons or 32.6 percent of those having respiratory illnesses reported experiencing increased irritability. This was further described by ill sample members as not having their usual amount of patience and tolerance for everyday tasks and responsibilities. A woman with a cold did not feel like doing the washing or walking to the market; these tasks were completed sin entusiasmo (without enthusiasm). Women

reported that they did not have as much patience with the demands of their children. Men reported going to work and wishing they could have stayed at home. Parents reported a child with a respiratory illness was one who no quiere nada (did not want anything or was not pleased or contented). The child was not happy being held by the mother, did not want to lie down and could not be amused by siblings and did not want to play.

Gastro-intestinal and abdominal symptoms were perceived generally as most severe; ill persons experienced more pain and generated more concern and worry. Table 29 shows that gastro-intestinal and abdominal symptoms resulted in more changes in conduct and daily life activities than other categories of symptoms.

Table 30 indicates that during all illnesses in this one month period, adults managed to fulfill their ascribed roles as mothers and fathers (the only exception was the woman who was hospitalized during this time). One woman who experienced severe abdominal pain was unable to work outside of the home. She remained at home with her four children (all under five years of age) and reported she would have felt better going to work and leaving the children at home. She was a vendedora (seller) in the market and took the children with her during her usual working day.

The men who reported illness symptoms continued to go to work; not fulfilling work obligations would mean the loss of a job. This also was true for women who were formally employed; women who worked as sellers in the market could more easily remain at home as they would only lose a day's wages. Both men and women reported

they were able to perform their usual work at home, but women said that men did not do anything around the house anyway. Changes in conduct or usual role performance were most likely to occur in recreational activites such as visiting family and friends, watching television or attending church meetings. Protestant families attached more significance to religious activities than did Catholic families. A few Catholic sample members attended church services on a weekly basis, while a number of Protestant families attended four or five meetings per week. These activites were curtailed during illness experiences with the ill persons indicating that if they did not feel well, they preferred to stay at home. Parents tended to keep children at home during an illness episode; they were left in the care of an older sibling or relative if the mother worked outside of the home.

In summary, the response of the family to any illness symptoms was usually some degree of worry depending upon the perceived severity of the threat from the illness symptom. Shame was most frequently reported with emotionally derived illnesses and was reported in the one case of spouse abuse. Anger was reported in the abusive incident by the family members as well as being attributed to the abuser; the anger on the part of the families was directed at the abusive husband, not the victim. The only other incident of reported anger involved a young pregnant women who was experiencing frequent and painful leg cramps. She reported that she had ceased discussing them with her husband because he became very angry with her complaints and had told her that they were her own fault;

if she were not pregnant, she would not be having problems.

The Management of Illness

The data regarding illness experiences has shown that health concerns among members of the sample were closely associated with everyday life styles. The actions taken during an illness episode were integrated with continuing everyday behaviors. Health behaviors were related to individual and family customs and the available resources in the social environment. Previous authors (Ailinger, 1977, Freidson, 1961; Polgar, 1963) have described a series of phases and events which individuals experience between the time they perceive symptoms and where they seek treatment. These investigations indicate that the person who perceived himself to be ill interacts with a number of consultants (family, kin and friends) prior to seeking care from someone who is viewed as a health care specialist.

Most authors have agreed that a process takes place through which patients pass when they first perceive themselves to be ill to their final choice of therapy. It is in how this process is defined that authors differ. In all of these studies, there is an underlying assumption that cultural and social factors play a significant role in shaping this process. This process of health care seeking has been labeled the lay referral system and is based, in part, on the description of the lay referral system by Freidson (1970) which identifies the structural conditions under which consultants are chosen and the nature of the cultural conditions which

influence this process.

Freidson's model was designed to indicate the relative likelihood that ill persons would consult a professional practitioner in addition to others, although it identifies the interactive processes with significant others whether or not a professional practitioner is consulted. Freidson (1970) suggested that the probability a professional physician will be consulted for a particular health problem is related to 1) the degree of congruence between the patient's health beliefs and those of the physician, and 2) the degree of cohesiveness of the social group of which the patient is a member. Freidson contrasted the extended and cohesive social relationships characteristic of lower socioeconomic classes with the loose and truncated relationships of higher class people. This model is based on the assumption that professional health care is available and that the client has access to it.

Dingwall (1976) has suggested that Freidson's model assumes that only professional physicians have the ability to "correctly" label and cure disease conditions. If clients do not understand or adhere to scientific beliefs and understandings regarding illness, the physician will seek to reorganize the client's experiences in medical terms. Dingwall stated that, according to the Freidson model, "it is up to the physician to determine what is 'really' wrong and persuade the client to accept the 'proper' scientific treatment" (p. 33). Dingwall also argued that the model of lay referral systems is a post hoc construct, imposing a form and structure on a series of events that bears no contingent relation-

ship to the procedures whereby this series of events was produced.

The alternatives for illness management described in this research have both cultural and structural dimensions. Using the information related by informants regarding relative objects, people and events, the categories were created for the purpose of explaining the therapeutic actions that were taken when illness occurred.

Sources of Care During Illness

Data collected by the use of the FHC revealed that a considerable number of individuals could be involved in a particular care seeking episode. Table 31 shows that the majority of persons who identified themselves as ill utilized multiple sources of care. The informal or non-professional types of care appeared to have greater importance than did the professional or institutional resources for health care.

Self Care

When an individual in the sample perceived himself to be ill, this information was usually shared with another member of the household. Table 31 shows that during the FHC, only nine of 135 reported symptoms were not disclosed to family members. These undisclosed symptoms were perceived as minor conditions that would disappear within a few hours time without any form of intervention. Examples were tiredness, muscular aches and slight headaches. Self-treatment, meaning some kind of care or treatment by a single individual without involving another person was infrequently reported by sample members and amounted to only 7 percent of care sources.

Table 31

Sources of Care and Illness Conditions[a] During a One-Month Period in the Sample[b]

Sources of Care	Modalities of Care	Common Illness Conditions
Self and Family Care (32%)	Home and herbal remedies	Respiratory conditions
	Home treatments, simple medications	Minor health problems
Self-addressed (7%)		Minor aches and pains
	Pharmaceutical medications	Beginning illness conditions
Family (25%)	Advice, information sharing	
	Consultation	
Community Care (61%)	Home and herbal remedies	Gastro-intestinal problems
	Home treatments	Emotionally derived illnesses
Social network (19%)	Advice, information sharing	Muscular aches
	Suggestions, consultation	Severe colds, cough, flu
Pharmacies (32%)	Simple and pharmaceutical medications	Headaches
		Fever
Indigenous Care Givers (5%)	Injections	
	Prayer and Faith healing	
Religious Systems (5%)		
Professional Care (7%)	Prescribed herbal remedies	Infections
	Advice and special instructions	Severe and/or chronic gastro-intestinal symptoms
Curanderos (1%)		

Table 31 Continued

Sources of Care	Modalities of Care	Common Illness Conditions
Professional Care (7%) continued		
Spiritualists (1.5%)	Pharmaceutical medications Prayer	
Public Health Care Facilities (3%)	Assistance from Supernatural Prescribed rituals	
Private Physicians (1.5%)		

[a]N = 135

[b]N = 132

Family Care

Table 31 indicates that 34 symptoms, or 32 percent of all reported illness were disclosed only to family members living within the household setting. This disclosure immediately involved another family member in the shared awareness of the illness symptom, in the evaluation of the symptom, and in the consideration of what should be done. At the very least, it established a bond of shared concern and watchfulness between the ill person and another family member. Table 31 shows that the majority of symptoms disclosed to family members were cared for by home and herbal remedies, advice, information sharing, and special treatments given by other household members or self-applied by the ill individual. Simple medications such as aspirin or Alka Seltzer were used in home care as well as pharmaceutical preparations. As can be seen from Table 31, families successfully managed to care for a wide variety of illness conditions. Twenty-five percent of illnesses reported during the month of the FHC were cared for within the family constellation.

The family as a source of care made major contributions to the treatment of illness in a variety of ways. Family members acted as consultants, readily sharing health information and prescribing actions for recovery. In particular, middle-aged or older women fulfilled this role and were regarded by family members as being knowledgeable and helpful in the diagnosis, treatment and care of illness. Families who lived in nuclear households, usually a young couple and their children, tended to seek advice outside the household. The most frequent pattern was that of the young mother con-

sulting her mother, aunt or even an older neighbor.

The extended family, with its ability to scrutinize every aspect of each member's life, was intimately involved in every aspect of illness. Care of the sick individual began when the person experiencing symptoms disclosed the nature of the illness condition to his family. Family members were then in a position to interpret, define and validate the process of illness. So far as was possible, illness was contained or cared for within the family sphere or the network of kin and neighbors.

An illness is rarely a pleasant experience even in a comfortable and supportive environment. When it occurred in locations such as San Marcos, it was particularly uncomfortable because the social and material environment posed severe challenges to the care of the ill. A primary concern was the matter of space. Most homes had a combination living room-bedroom which was shared by four or more members for sleeping purposes. An ill person, especially a crying child in a crowded bedroom meant little or no rest for a number of other family members. During the daytime, children playing inside during the cold weather or the rain disturbed the privacy and rest of the sick person. The lack of indoor plumbing facilities or running water created difficulties for both the ill person and the care-givers. Washing soiled bed linens was an arduous, time-consuming task and placed extra burdens on the already over-worked women of the family. Flies, dust and the climate also contributed to the difficulties of care for the ill in the home environment.

Almost all families had various herbs available for the pre-

paration of home remedies; if not, a child was sent to the neighbors or a store to obtain whatever was needed. The knowledge of herbal medicine was shared by both men and women although women assumed the responsibility for the preparation and administration of herbs and were generally acknowledged to have more understanding in their use than did men. Rarely did families have simple medications such as aspirin or Alka Seltzer on hand for the treatment of illness conditions. A family member was dispatched to a pharmacy when a medication was deemed necessary.

Ill persons reported that medications either from a physician or pharmacy and the use of home remedies were important factors in their care and recovery. Other measures, such as massage, personal hygiene, alcohol rubs, and extra fluids were viewed as helpful in care. Certain prescribed behaviors were believed helpful during an illness occurrence. The respondents said that most ill persons should have extra rest or sleep if at all possible. Nutritious foods and beverages were believed helpful in the recovery process. The tendency to classify illnesses, foods, and medicines according to the intrinsic hot and cold properties was considered important during an illness because the ill person was perceived to be in a weakened and susceptible state.

If the family concluded that a visit to a physician was necessary, the situation immediately became complicated. If physically able, the ill person, accompanied by a family member, took the bus to the downtown area and walked to the hospital or physician's office. If the ill person was too sick or weak to attempt the

trip by bus, a family member arranged for a taxi to transport the ill person from his home to the source of care. A visit to a private physician, the probability of prescribed medication, and the taxi fare all required a ready source of cash money that took considerable planning on the part of the family. Sometimes one or two days were necessary before sufficient money could be borrowed and the visit finalized.

Illness management was a disproportionate burden for the sample families since they did not have the economic resources to sustain an ill, non-productive member for long periods of time. An illness presented other economic burdens; not only was the ill person nonproductive in the economic sense, but the mother or wife who was responsible for the care ceased her own economic activities to provide the home care of the illness. Often an ill child was taken with the mother to the market. The child was placed on a blanket under a table while the mother carried on her work activities directly above the child.

Care of the ill within the home setting is not an unusual phenomenon, although it has received little systematic treatment in the literature. Most studies of traditional Latin or Mayan societies have focused on the lay healer, many of whom were spectacular enough to distract attention from the ordinary routine of home sick care. The data from this investigation show that care of the ill person should be viewed in the context of the extended family and more specifically as the role of women, whose responsibilities included sick care in all its varied aspects. The interpretation

and validation of illness occurred within the family. The care of the ill person, from personal hygiene, special foods, observation, preparation and application of home remedies (which may include herbal medicine) to the strategies used to obtain specialists care all fall within the domain and responsibility of women.

The family served as an intermediary between supportive and traditional care given in the home and the informal community and professional care systems. It was usually a family member, living within the household setting, who sought other sources of care on behalf of the ill person. Maintaining a reciprocal relationship with community and professional care sources was an important function of the family during illness.

The skill and confidence of a family household operating in unison facilitated the treatment and care of the ill member. It was usually the household, rather than the ill person, that exerted the energy necessary to attain health goals. Data collected through the FHC showed that the family was the most frequent locus of health decision and action in the search and provision of care. In the long run, it was most often the household unit, not the individual, and certainly not the health professional, that decided whether or not to seek or use another source of care.

The health problems of the sample households were interlocking as the health of any one member was likely to affect the family system as a whole and occasioned a series of accomodations on the part of other family members. Children, of course, relied upon parental action for the care that was needed for their illnesses. The family

unit was continually involved in the care of the ill individual and did not relinquish the role even when a health professional was consulted. Table 31 shows that 68 percent of all reported illness symptoms described by the respondents received care outside of the family either from a community or professional source. It is important to understand that families integrated many aspects of the care received from outside sources into their own modalities of care. Advice was rejected or complied with, medications were purchased and given according to directions and other special regimens were carried out by the family. The ability of the family unit to provide nursing care for the ill member was a very important factor in the over-all scope of health care as families implemented much of the care that was dispensed at other sources within the larger system.

Community Care Sources

The health capability of the community has been defined by Freeman (1970) as "the degree to which the community is able to deal with its health problems and needs and to what extent economic, institutional, and human resources are able to do the things required to assure well-being of its people" (p. 257). The variety and use of human resources available within the small *colonia* was considerable. The flow and exchange of both services and information relating to health and illness have evolved into complex social relationships that provided the basis for the care of the illness.

Social Networks. The social networks in San Marcos consisted of bilateral kindred, friends and neighbors, all of whom lived in the compact settlement or adjoining city. Approximately one-half of the

sample families reported kin living within the colonia and all households reported kin within the city. The kinship and friendship ties generated processes such as assistance in the care of the ill family member, information sharing, advice giving, help, assistance and economic exchanges during times of illness. These social networks played an active role in assisting the ill person and his family define illness, evaluate the severity of the symptoms, and helped to structure the expectations and behaviors of ill family members. These two factors continually augmented each other and dictated the range of culturally defined care and care seeking patterns.

The data collected by the FHC revealed that certain factors appeared to be important in the formation of social networks. Social distance was an important consideration; social networks consisted of kin or friends who were approximately in the same socioeconomic level and from the same cultural tradition. Networks were reciprocal, exchange of assistance or advice regarding health matters occurred only in the context of individuals or families feeling free to both give and ask for certain services. When financial assistance was needed for health care, a friend or kin in similar circumstances was usually consulted first. If the friend or kin loaned money, he/she would later feel free to ask for similar assistance. Relationships dealing with economic exchange became non-reciprocal if a fairly large sum of money was necessary (by colonia standards this would be twenty-five dollars or more). Then it was usually necessary to seek out an acquaintance (either Indian or Ladino) who might be prevailed upon to loan the money. This type

of relationship more closely approximated the patron-client relationship in that the two persons in the relationship were not equal.

Physical distance was also important in the formation of social networks; the intense and daily relationships between close neighbors or kin were conducive to mutual assistance and advice during illness episodes. Since no members of the sample population owned automobiles, close social ties were limited to those persons who lived within walking distances.

Ill persons and their family members reported they turned to certain persons for advice and counsel during illness for a number of reasons. Factors such as mutual trust, confidence, compatability of beliefs and social closeness were described by informants. Sample members reported that most important was a feeling of confianza (confidence) that the person they asked for help and advice would be able to give them the assistance they needed. Confianza implied trust and shared concern, and was described as existing between household members, other kin, neighbors and friends.

Pharmacies. Pharmacies represented the most frequently utilized source of care reported in the FHC. Table 28 shows that 43 reported symptoms were treated at this source of care and progressed no further. This represented 32 percent of all illness symptoms. Information elicited during illness episodes indicated that pharmacies continued to be important sources of health care even when the ill person sought care from other sources.

Though it was known that the use of "prescription" drugs, freely sold over the counter, and taken without medical supervision has po-

tentially dangerous consequences, pharmacies were nevertheless a frequent and viable source of care for residents of the colonia. The widespread use of pharmaceutical medicines indicated the belief in the efficacy of scientific medicine in that it produced the desired results, alleviation of illness symptoms. The use of self-purchased medications was related also to the frequently expressed belief by respondents that physicians do nothing except prescribe medications; a way to avoid the ordeal of long waiting lines and the fee was to go directly to the pharmacy, purchase the medication and thus avoid the cumbersome and expensive process of seeking services from a physician.

It can also be argued that the frequent use of pharmaceuticals by the sample members not only demonstrated belief in their efficacy, but also indicated the sample's lack of understanding of basic physiology and body functioning. The underlying assumption is that anyone who understands drug toxicity and other implications of unsophisticated drug use would not succumb to this practice. This investigator would argue, however, that compared to other populations, such as middle class Americans who are under routine supervision of physicians, sample members actually used fewer medications. In this sample of 134 persons, no one routinely took any medication nor did anyone even frequently use medications. The only exception was the one hospitalized woman who was suffering from diabetes and chronic leg ulcers. Medications in this population were used primarily for illness symptoms and when the symptoms lessened, the medication was discontinued. This is not to deny that

there were not persons in the sample who would have benefitted from long term drug therapy or that certain drugs, such as antibiotics, were used unnecessarily. The sporadic use of medication by sample members does raise questions about potential compliance with long term drug therapy in the treatment of chronic conditions.

Indigenous Care Givers. These persons were identified by sample members as offerring sencillo (simple) kinds of health care. The most frequently used resource in this set of care givers was the local injeccionista, who gave injectable medications for a small fee. Another example was a local herbalist who prepared and sold small packets of herbal medicines. She was particularly well known for her special headache remedy which she sold for five cents, the same price as two aspirin at the local pharmacy. Women in the colonia who managed the small tiendas were considered to be knowledgeable regarding "over-the-counter" drugs and patent medicines. They were often consulted for advice prior to purchasing a medicine for diarrhea, cold, or toothache.

Outside of the colonia in the larger city was a variety of healers who specialized in the treatment of selected illness conditions. They worked out of their homes, usually on a part-time basis. For example, there was a señora who sold a special toma (liquid preparation) to cure alcoholism; another señora specialized in the treatment of fractures, while a third reportedly was able to cure susto in children. These community care givers were usually Indian women who maintained traditional aspects of village culture in an urban setting, incorporating new meaning to old forms of care

and incorporating new forms under old interpretations. Their services were at a point between family care and the care offered by the professionals.

Religious Systems

The request for religious intercessions for healing purposes was more apparent in the seven Protestant sample households. During the course of the study, Catholic members reported that they would occasionally light a candle and offer a prayer for the recovery of a sick family member, especially if the illness was viewed as serious. No Catholic sample member reported requesting religious intercession during the FHC. Table 28 shows that sample families (all Protestant) reported seven instances of religious intercessions for illnesses during this one month period which corresponds to five percent of all reported symptoms.

The ritual ceremonies accompanying the request for assistance from God differed slightly within each household. One small boy, suffering from abdominal pain was annointed with oil consecrated by the local pastor; his father then prayed for his recovery. During another adult illness, several hermanos (brothers), all members of the local church, visited the home and offered a prayer for the sick person's recovery. Protestant sample members stated that they believed that illness could be healed by fe (faith). Faith healing and herbal remedies were the only acceptable forms of illness intervention for the Protestant minister and his family who were members of the sample. Other Protestant sample members viewed faith healing as an important addition to all other modalities of care.

The Professional Care Providers

Table 31 shows that a total of nine visits were made to professional care providers during the month of the FHC. A professional health care provider was defined as an individual who was recognized in the community as having the ability to heal, and who practiced his or her profession on a full-time basis. All health professionals in this investigation provided care on a fee-for-service basis. The investigator was not aware of any other form of remuneration.

Five of the visits (to multiple health care providers) shown in Table 31 were made by a six year old girl who complained of abdominal pain over a 28 day period. She and her parents made one visit to a cura, two visits to a spiritualist, and two visits to a public clinic where she was seen by a physician. This entire episode of illness was described earlier in Table 27, case example number six. In addition to this particular child, two adult women saw private physicians, and one child and one adult woman were seen by physicians in public facilities. The adult woman was hospitalized the entire period of the FHC; this was recorded as one visit to a public facility.

Table 28 shows that professional health care was sought most frequently for illness symptoms related to gastro-intestinal and abdominal conditions and infections of the lower extremities. The data may be somewhat misleading unless it is clear that five visits to various health professionals were made by the one child with a gastro-intestinal complaint. Data collected during the family

health histories and throughout the study have suggested that sample familes frequently did not return to the first choice of care if symptoms continued. The data collected during the FHC also suggest that families often sought another type of health care practitioner as well.

Table 31 shows that during the one month of the FHC nine illness conditions or seven percent of all symptoms reported by the sample were seen by some type of health care professional. Alpert et al., (1967) requested that 78 low-income families (selected at random from a case pool of 500 families in the Boston area) record illness symptoms using a modified FHC. These low-income families sought professional medical help in only 4.7 percent of all episodes of illness in a one month period. Ailinger (1977) followed 19 families of Latin-American descent living in an eastern city in the United States, utilizing a FHC for a one month period also. Illness referrals to the professional medical care network accounted for 30 percent of the reported incidents in her research. No indigenous practitioners were contacted in either of these investigations.

In this study, the data showed that sample families utilized a variety of professional care sources, each reflecting different healing traditions. One visit was made to a cura, two visits were to spiritualists and six visits were made to physicians. During the course of the study, the investigator was able to accompany members of the sample when they visited private physicians, public facilities, curanderos and spiritualists. Each health care provider

was told that the investigator was a nurse conducting research of health care practices and that the client was a member of the sample population. All of the practitioners allowed the investigator to observe and record notes during the sessions. The majority of them appeared willing to answer specific questions. The ethnographic data describing visits to various health care specialists are shown in Appendices I, J, and K.

Data collected from curas indicated that they adhered to two major classifications of diseases. These classifications were based on concepts of "natural" and "supernatural" causation. The curas reported a predominance of the naturally caused illnesses in their clients. The diagnoses made by curas were all in scientific medical terminology (with the few exceptions of folk diseases) and curas usually prescribed both scientific and herbal medicine. In addition, curas tended to prescribe special diets and special activities for exercise and rest.

A high degree of confidence existed in the sample population toward the indigenous practitioners and in their ability to diagnose and treat disease. After a vist to Dr. Victor, a local cura (See Appendix J), Maria said, "Imagine, he could tell what was wrong with me by just looking at my eyes and tongue!" She experienced alleviation of her symptoms within a few days after seeing Dr. Victor and, as he predicted, she was well enough to return to work within a week. The "suggestibility" of the client may be an important psychological factor in the recovery process. As previously noted in the discussion of the information obtained in the health histories, clients

seemed to have more expectations of physicians than of indigenous practitioners. This may be the result of the widely circulated notion of the superiority of western scientific practitioners. When scientific medicine, as such, is not as effective as it claims to be, clients may seek other sources of care including indigenous practitioners. The data indicated that by using a mix of scientific medical approaches and traditional health practices, indigenous practitioners were equally efficient and appealing in the eyes of their clients.

Alger (1974) has described one possible outcome of urbanized curanderismo in the United States where mimicry of the medical system becomes a dominant theme within the folk healing systems. This appeared to be the case with the four curanderos interviewed during the course of this research. Sample members did report prior visits to curas in more rural areas who used other forms of treatments (including flagellation) and who adhered more to traditional beliefs and practices. The data suggested that in this urban area the practice of curanderismo was patterned on that of the scientific medical system although the beliefs regarding causation differed to some extent. The notion that folk practitioners "just practice what everybody already knows" does not seem relevant in this investigation. Folk diseases were treated at home by mothers and grandmothers and seemed to afflict primarily young children and women. Trotter and Chaviara (1980) suggested that when the efficacy of modern medicine has been empirically demonstrated numerous times, it has fulfilled the prerequisites for a successful innovation and

becomes an integrated part of the cultural system. This seemed to be the case in this population.

Espiritistas (spiritualists) conducted their activities in centros espiritistas (spiritual centers) that usually were staffed with two or more individuals who had occult abilities. The practice of spiritualism revolved around a belief in spirits or souls who inhabit another plane of existence but who are able to make contact with the physical world through a medium. The activities of spirits closely approximate their former activities and abilities in this world. Thus, a famous doctor in this life (but now dead and living in the spirit world) can be contacted through the efforts of the spiritualist who serves as the medium and who asks the spirit doctor to assist in the treatment of disease conditions. The spiritualist acts as a communication link between the spirit doctor and the patient, sometimes relaying messages, and other times providing different kinds of treatment under the guidance of the spirit doctor. A visit to a centro espiritista is described in Appendix K.

Informants differentiated between curas and spiritualists primarily by their methods of diagnoses. The curas used a lampara (lamp) to examine the eyes and the tongue of the individual to obtain a diagnosis. The spiritualist entered an altered state of consciousness and made contact with the spirit world, an example of classical shamanism. Informants reported that both curas and spiritualists used herbal and scientific medicine in their prescribed cures. Not all spiritualists offered invisible surgery in their

prescribed treatment.

The incorporation of selected areas of scientific medicine into indigenous health care systems, such as the use of scientific medicines and the elaborate rituals of invisible operations clearly demonstrated the belief in the efficacy of some aspects of scientific medicine. At the same time, the use of indigenous health care systems allowed for certain modalities of care that were culturally important to the sample members.

The relationships between indigenous health practitioners and their clients appeared egalitarian and diffuse. The indigenous practitioners were members, or insiders of the cultural group, sharing similar backgrounds with their clients. The attitude of the indigenous practitioner to his client appeared less authoritarian than relations between physicians and clients. The interaction style of the curas made a lasting impression. First of all, they appeared genuinely interested in their patients; they were willing to take time to talk with them and to discuss what was wrong. Secondly, they did not treat illness as an individual affair, but considered it a family concern and included the attending family in the discussion of prescribed care. The prescribed management of the illness was collectively oriented rather than directed towards the individual client and included both the family and the client in the management of the illness.

The data showed that the family groups and clients were able to act independently towards both traditional health care providers and physicians, amending and rejecting the specialist's advice and

treatment. Maria and her mother visited a private physician (see Appendix I), but they finally rejected the return visits because his fees and the cost of the prescribed medication were believed exorbitant and the repetition of his partially adhered-to therapy did not alleviate Maria's symptoms.

The physician-client relationships were more hierarchial than those observed between indigenous practitioners and their clientele. The data showed that relationships between physician and client were authoritarian, advice-giving, and directing in nature. While physicians seemed willing to answer specific questions, they seldom took the time to explain what was wrong with the client. Their relationship to the client was specific in that it was limited to a certain disease, its diagnosis, and treatment. The relationship closely approximated the patron-client relationship. It existed between persons who were unequal and who held different views regarding not only illness, but the world in general.

Private physicians seen by members of the sample were Ladino; they did not share the world of their clients. While some cultural values and beliefs were shared between Ladino physicians and Indian clients, others were not. Both physician and client were members of a culture that perpetuates the myth that the Ladino, by nature of his birth, is superior to that of the Indian. In addition, physicians belong to a professional group that assumes by virtue of its scientific knowledge, only members of the group are qualified to diagnose and treat disease.

The choices made by informants in the sample to obtain treat-

ment for illnesses were based on the knowledge of the relative effectiveness of the alternatives. Choices were influenced by assumptions about the causes of illnesses and their appropriate treatment. The data suggested that when alleviation of illness symptoms did not occur, individuals in the sample sought other types of health care practitioners who offered different kinds of care modalities. Finally, relative costs and access were also important considerations in that spiritualist treatments were usually less expensive and more readily available than services offered by curas or physicians.

Summary and Conclusions

During a one month period 132 sample members were asked to describe symptoms of illness and actions that were initiated to care for each illness symptom. During this period, 77.4 percent of all women, 24.3 percent of all men and 43.3 percent of the children in the sample reported symptoms of illness. A total of 135 incidents were reported. Respiratory illnesses were reported most frequently, followed by gastro-intestinal and abdominal symptoms, emotionally related illnesses, problems of the lower extremities, headaches, and other categories of illnesses. The average duration of an illness was 3.6 days. Women reported more emotionally derived illnesses. This was attributed to women's prescribed cultural role which limits the behavior and expression of women.

Case episodes of illness were presented to identify what actions occurred during illness and how these actions were rationalized. Illness interpretation occurred during three stages;

identification, decision making, and treatment and care. Further interpretation and evaluation of the illness was influenced by the degree of threat believed posed by the symptom as well as the fear and uncertainty generated when the course of the illness could not be understood or explained.

The management and care of illness were the major responsibility of women; men participated frequently in the identification and decision making processes. Home care of the sick was complicated by the social and material conditions of life in the colonia. Home remedies, treatments, medications and certain prescribed actions were viewed as important factors in the recovery process. The cost of professional care in terms of money, time and effort posed a challenge to the ill person and the family.

Sample families were asked about their perceptions regarding the severity of the illness symptom and resulting changes in the daily activities of the ill person. The data indicate that gastrointestinal and abdominal symptoms were perceived as most severe and precipitated more worry and concern on the part of the family as well as resulting in more changes in conduct and daily activities than other categories of symptoms.

Data collected through the FHC revealed that of 135 reported illness symptoms, 32 percent were cared for within the family constellation. Sixty-one percent sought forms of care available within the community, such as advice and support from social networks, or specific care from pharmacies, indigenous care givers or religious healers. Only seven percent of the reported illness

symptoms were seen by physicians or indigenous practitioners. Care from physicians and indigenous practitioners was sought more frequently for symptoms involving gastro-intestinal and abdominal complaints or infections.

Care provided by family members was shown to be the major source of care and support to ill individuals. Kinship and friendship ties contributed to the decision-making and actions taken during illness, regardless of whether or not care was sought outside of the home setting. The social networks that arose among individuals involved in an illness episode served to provide health information, advice and guidance for care as well as emotional support and care-giving assistance during illness.

Community sources of care were considerable and varied. They included the social networks of kin and neighbors, community resources such as pharmacies, indigenous care givers and religious systems. The data show that 61 percent of all illnesses were adequately managed within the scope of services available at the community level. Thirty-two percent of ill persons who sought care outside of the family setting obtained services from pharmacies indicating that pharmacies which dispense "prescription" medicines over-the-counter were heavily relied upon as a viable source of care by sample members.

Seven percent of all sample members in this one month period sought services from physicians or indigenous practitioners, either spiritualists or curas. Indigenous practitioners incorporated both scientific and traditional methods of care in their practices.

In addition, indigenous practitioners were viewed by the sample as insiders sharing similar circumstances and cultural backgrounds.

Professional physicians tended to orient care to individuals as opposed to directing it towards the family constellation. The relationship between physician and client was authoritarian and directing in nature. While scientific medicine has clearly become an integrated part of the cultural system, the relationship between physician and client is based on the belief of the physician's ability to alleviate illness symptoms. Sample members stated they believed that treatment from a physician offered the highest likelihood of cure. The expense and inconvenience of going to a physician for treatment, however, were important constraints. Data from the FHC show that modern medical services, either in public facilities or from private physicians, were utilized more frequently than traditional alternatives by the members of this sample.

CHAPTER VII

SUMMARY AND IMPLICATIONS

The findings from this investigation suggest a number of implications for the delivery of health care, nursing practice, and further research. Since the study was exploratory and descriptive in nature, with the major emphasis on depth in content and contact with a limited number of people, the findings and implications can be generalized only to the extent that the people, services, and general circumstances are similar to those described.

This investigation was focused on health and illness beliefs, illness experiences and the management of illness by urban Mayan families. Implications are discussed in relation to each of these factors. Suggestions for nursing practice, health care delivery, and general health policies are based on the assumption that the over-all purpose of the health care system, with nursing as a major component, is to provide good health care to those who need it. In the event that health needs are not being met, health professionals have the responsibility to determine why such a situation exists and to propose viable solutions. Barriers to health can exist in the attitudes and life situations of those who need care and in the attitudes and systems of those who provide health services. Those who provide care have full responsibility for the last of

these; they also have a role in helping those who need care to obtain services and to use them effectively. Implications are discussed within this framework.

The sample consisted of 22 urban Mayan families living in marginal economic circumstances in a highland Guatemalan city. They have been exposed in varying degrees to Ladino culture and to values perpetuated by "modern" technological cultures, particularly the United States. Although the sample have retained some aspects of traditional Mayan culture, their lifestyles reflected the effects of cultural change, class differences and discriminatory practices perpetuated by the larger society. The decisions that the people of San Marcos made to manage illness events were in a very real way influenced by the particular conditions in which they lived.

The central aim of this investigator was to describe beliefs and practices surrounding health and illness and to determine how sample members coped with illness including the selection of health care alternatives. On the basis of the data presented, it seems fair to conclude that this attempt has generally succeeded. This last chapter is concerned with the implications for health policies in pluralistic settings like that of San Marcos. In order to evaluate the data, some review of the findings is in order.

Illness Experiences

The data obtained from the health histories and the four week FHC indicated that the most common types of illnesses experienced by the sample involved the respiratory system (colds, flu, cough

and sore throats). Gastro-intestinal and abdominal conditions were the second most frequently occurring category of illness symptoms reported by the sample, followed by emotional conditions. Illnesses by diagnostic categories reported by the sample are similar to those recorded in the National Ambulatory Medical Care Survey (1980) and other similar health diary studies (Ailinger, 1977; Alpert et al., 1967; Demers, Altamore, Mustin, Kleinman & Leonardi, 1980) that have been conducted in the United States. Respiratory and gastro-intestinal illnesses accounted for one-third to slightly more than one-half of all recorded illnesses in these investigations. In the sample from San Marcos, these two categories accounted for 59 percent of all illnesses in the one-month period.

The data obtained in this research show that types of illnesses suffered by this urban Mayan population are not exotic traditional illnesses. While traditional illnesses are still a part of the illness experiences of the sample, they are not a primary concern in terms of over-all health status.

The illness distribution found in this research is similar to that of various groups studied in the United States, however, there are some differences that should be noted. The data show that gastro-intestinal illnesses may occur more frequently in the Mayan population possibly because of the environmental hazards. It seems reasonable to assume that poor sanitation predisposes a population to those diseases which are spread by unsanitary living conditions. Emotional illness recorded in the FHC occurred primarily among women. Other researchers (Ailinger, 1977; Alpert et al., 1967;

Demers et al., 1981) also found more illness episodes (for all major categories) among women. Different illness patterns between men and women in this sample were striking and further investigation should focus on those differences, especially as they relate to emotionally-derived illness symptoms.

The FHC revealed a high frequency of problems and a relatively small number of symptom free individuals in this largely healthy population. Comparison with the Alpert et al. 1967, Demers et al. 1981, and Ailinger 1977 studies indicates that the Mayan sample may have experienced illness symptoms more frequently. In the four week period of the FHC 100 percent of sample families experienced illness episodes compared to 93 percent and 89 percent in the Alpert and Ailinger research respectively. Although the FHC occurred during a period of climate change, or the "colds and flu" season, ethnographic data indicated that similar health problems were present during other periods of time. It seems that "good health" is not necessarily the absence of problems, but the presence of those that are either manageable or tolerable. Events of illness which are interpreted as serious occur against this background of "normal" symptomatology.

Like populations studied in the United States, the sample in this investigation tended to experience numerous relatively minor and routine kinds of illnesses. Given this distribution of illness symptoms, health practitioners who can provide generalized primary care for frequent, episodic illnesses would best meet the health care needs documented in this research.

The Influence of Traditional Beliefs

Data regarding the beliefs held about common illness manifestations show that traditional beliefs regarding the concepts of hot-cold, strength-weakness and the emotional states of the individual underlaid the ascribed causation, treatment and the prevention of many illness conditions. Illness was believed to be related to the individual's actions or behaviors. In short, the existence of traditional health beliefs in the sample has been demonstrated by the data presented. Sometimes these traditional illness beliefs were overlaid with a veneer of scientific medical views but probing beyond the first response revealed the existence of traditional models which explained illness and influenced subsequent health related behaviors.

There is current debate in the literature concerning the reaction of Third World peoples to western medicine. It has often been observed (Foster & Anderson, 1978) that such people frequently continue to resort to traditional healers and underutilize modern medical services, or use them at rates below what health planners might anticipate. Young (1981) noted that two general explanations have been offered for this phenomenon. One points to the influence of cultural factors, such as the pervasive adherence to traditional beliefs about illness and the influence of traditional practitioners. The other explanation involves restricted access to modern health facilities because of limited economic means or geographic inaccessibility. In a study of medical choice in an Indian village in Chiapas, Mexico, Young

(1981) attempted to demonstrate that adherence to traditional health beliefs did not limit utilization of modern medical services; underutilization of modern medical services resulted from the inaccessibility of facilities and the high cost of care.

The data from this investigation certainly do not resolve these issues. However, the findings do provide some evidence to support Young's position that cultural factors, such as traditional health care beliefs and the influence of indigenous practitioners are not inconsistent with the utilization of western medical care. In this study, data from the FHC revealed that western medical care was obtained in public facilities or from private physicians on a fee-for-service basis in 4.5 percent of the 135 illness conditions that occurred. Traditional practitioners were consulted for 2.5 percent of all illnesses. Alpert et al. (1967) found that low income families in the Boston area had 4.7 percent of illnesses treated by physicians. Ailinger (1977) reported that in families of Latin American descent living in an eastern city, 30 percent of the illnesses reported by the sample, were referred to physicians, an extraordinarily high percentage of physician referrals. In the Demers et al. (1981) study of illness behavior of 107 adults belonging to a pre-paid health care system in the Seattle area, utilization of health care professionals occurred in 5.4 percent of illness episodes. A more precise method of comparison, however, is to examine the annual visit rate of 3.06 in the Demers et al. sample, the 2.7 national average for the United States (National Ambulatory Medical Care Survey, 1980) and the results of this

research. In this investigation, western medical physican visits numbered six during the four week period, equivalent to an annual rate of only 0.58 for the sample.

The findings indicate that the sample were convinced of the effectiveness of modern medical treatment provided by a physician. Treatment by a physician for most kinds of illnesses was considered by most informants to offer the highest likelihood of cure compared with alternatives available. The circumstances in which traditional practitioners were consulted were relatively limited and when one considers the informational basis of the decision making, not totally unreasonable. A traditional practitioner was consulted if the illness was considered simple or uncomplicated. Considering the likelihood that traditional practitioners were just as likely to prescribe scientific medications (especially antibiotics) as were physicians and offer other treatment modalities as well, consulting a traditional practitioner was a logical choice for clients. Those illnesses for which modern medicine has no specific therapy or those in which the diagnosis implied an earlier failure of medical treatment (such as traditional illnesses, chronic conditions, terminal illnesses, measles or pertussis) were also referred to traditional practitioners. The data indicated that the demonstrated inability of a physician's treatment to cure the illness was often a factor leading to alternative choices.

Most often sample members reported a reluctance to use modern medical services because of economic inaccessibility. This was due in part to the private medical system's fee-for-practice services

which might cost at least a week's income and the public system's inability to provide efficient and adequate services. On the other hand, data has shown that traditional practitioners, especially some curas charged as much or more for an office visit than did private physicians. However, a closer examination of the actual cases involved revealed that in most cases, sample members chose a traditional practitioner because they suffered from various illnesses for which medical science has no cure or that medical science failed to provide alleviation of symptoms and alternative healers were then consulted.

Treatment Alternatives For Managing Illness

Self and Family Care

Since most illnesses in their initial stages were judged to be non-serious, self and/or family treatment by the respondents was the most frequent initial response to illness. Illnesses that presented several symptoms continued to be treated at home if they were believed amenable to home remedies and symptoms did not become progressively serious. An example is the home treatment of respiratory conditions or simple gastro-intestinal problems such as nausea, diarrhea, or vomiting. If fever or other complications developed and did not respond to home remedies, exceptions to home care would occur.

Home care of illness episodes, application of home remedies, and the self-administration of medications were practiced for a

number of reasons. Respondents reported confidence in the efficacy of home remedies, or the traditional ways of curing illness. The over-the-counter availability of a great variety of medications led to a cost-based preference of self-prescribed medications prior to other actions. Last of all, sample members expressed the belief that most illnesses could be treated adequately in the home situation and did not require additional kinds of care. Physicians and traditional practitioners could not cure some illness (especially respiratory diseases, aches, minor pains) as time was believed to be the essential factor in the recovery process.

The data have shown the importance of family members in the home care of ill persons. Family members, especially mothers and older women in the household need to be included in all aspects of illness treatment. To ignore the culturally designated care givers neglects their potential contributions to the continuity of care and fails to recognize the interrelationship between the family and the health status of its members. In one way or another, family members were involved in the decision making and therapeutic progress at every stage of a family member's health and illness, from the state of being well to illness, treatment and recuperation. In other words, family oriented health services would seem desirable.

Community-Based Resources

The data have indicated that 61 percent of all illness events in a one-month period received some kind of health service from these mid-level sources of care. The kinds of services ranged from

advice and guidance from kin and friends (social networks), medications and advice from pharmacy personnel, to the more "professional-like" services from indigenous care givers and faith healers. Similar studies conducted in the United States have not revealed either the number of community-based resources or the significant contribution these resources make to the treatment of illness, although Ailinger (1977) reported that ten percent of illness events in a Latin American descent group received advice for treatment from kin and friends.

It may be that this large segment of illness care provided by community-based resources is more typical of developing countries and is a response on the part of a community to fill the gap that exists between family care and the inaccessible professional medical system. The data indicated that community resources were the most frequently utilized source for illness treatment. Further research in the United States and other countries should attempt to identify and to describe the degree to which individual communities respond informally to health problems of residents.

The Role of Physicians

In Guatemala, health care has diverged along two separate routes; a private system exists for those who have economic resources for care. For the majority of people without these resources, public or charitable institutions are available. As the findings have indicated, low-income sample members preferred private sources of care when financial means were available; otherwise,

the public system was utilized by sample members.

The expense and the inconvenience in terms of lost wages were important restraints to seeking professional medical care. Because respondents had sparce economic resources, the expenditures necessary for physician's services competed with other essential household needs, usually money used to purchase food. As a result, private physicians were utilized only as a last resort and in fairly grave situations. This practice placed physicians in a disadvantageous position as they tended to see clients who had already developed serious illnesses. The client, expecting a cure, was disappointed when fast results were not forthcoming and often turned to other alternatives such as another physician, self-medication, or a traditional practitioner.

Public facilities suffered from a lack of adequate funding; bureaucratic procedures contributed to fragmented and inadequate health services provided in public hospitals and public health clinics. Despite apparently genuine efforts on the part of the government to provide improved facilities, respondents believed that public facilities were inferior and that care provided in such facilities was not equal to care from private physicians.

The data indicated that health education, counseling and anticipatory guidance was not a routine part of the services and care received from most health professionals. The findings emphasize the need for physicians and clients to form continuous relationships which would allow for health maintenance, prevention and the early treatment of illnesses. Under present circumstances,

sample members, most of the time, depended upon the system of health care delivery with which they were the least well equipped to cope--the private, fee-for-service physician. It was not a satisfactory relationship, because it did not permit the delivery of health services that would most adequately meet health care needs.

The Traditional Practitioners

The data have shown that the services of traditional practitioners were occasionally utilized by the sample when illness occurred. The health histories showed that sample members, to some extent, utilized the services of curas. Visits to spiritualists were not reported in the health history interview. The information from health history interviews described in Chapter VI was obtained at the beginning of this investigation. Additional ethnographic data and the FHC revealed that the sample utilized curas and spiritualists more frequently than had been reported previously. This may indicate some reluctance on the part of respondents to report utilization of traditional practitioners to western health specialists such as the investigator. It does indicate the necessity of using research instruments that are related to what people actually do as opposed to those which sample only what people say they do.

Data have shown that the traditional system of medical beliefs and practices remained vigorous, and that traditional practitioners were an integral part of the health care system. A decision to con-

sult a traditional practitioner did not necessarily imply a decision not to consult a physician. The non-use of physicians by sample members cannot be attributed to competition from traditional practitioners. During the FHC, one visit was made to a cura, two visits were made to a spiritualist, while six visits were made to physicians. Findings showed that traditional practitioners were utilized less than physicians and that often their services were used in conjunction with medical services or for illnesses for which medical science was considered inappropriate or inadequate.

The high cost of cura services and the fee-for-service practices placed the same economic restraints on their services as has been described for private medical care. The services obtained from spiritualists were less expensive and seemed to require more adherence to traditional beliefs, especially the belief in the existence and role of spirits. The use of spiritualists for healing purposes can be viewed as adaptation by the sample to the economic and social marginality in relation to the larger society. Spiritualists filled a need caused by the absence or inadequacy of both professional and traditional medicine due to the nature of their fee-for-service system which sample members realistically could not afford.

Conclusions

This investigator has identified health beliefs and practices in an urban Mayan population. The findings revealed that the sample adhered to numerous traditional beliefs concerning illness and that

these belief systems did influence individual actions that were taken in response to prevention and treatment of illness. At the same time, the results indicated that the sample believed in the efficacy of scientific medicine. When home remedies failed to alleviate illness symptoms, or if the illness became serious, the respondents sought health care from physicians.

The findings provided little support for the notion that it was "cultural" factors, such as traditional beliefs about illness or traditional curing practices which accounted for the low utilization of professional health services. Underutilization of modern medical services resulted less from the sample's reluctance to use them than from frequent inaccessibility because of economic barriers.

Solutions to health care problems in settings like the colonia cannot be found entirely within the community itself. The economic reality limited the resources available for health care on a general level; on a personal level, it limited choices and options. Political institutions must create economic and social structures which improve living and working conditions of poor people before they can obtain their fair share of whatever medical services their government is capable of providing. In the present political climate of Guatemala, any transformation of the economic and political structure appears highly unlikely without considerable social turmoil.

APPENDIX A

GUIDELINES FOR DEMOGRAPHIC DATA QUESTIONNAIRE

Family Number

Head of Household

Household Composition

- Name
- Sex
- Date of Birth
- Relationship to Head of Household
- Years lived in Quetzaltenango
- Marital Status
- Spouse's Name
- Number of Children

Religion

Years of Education

Occupation

Monthly Income

Languages Spoken

Style of Clothing Worn by Women and Female Children

APPENDIX B

RATING OF VARIABLES USED IN DETERMINING

ECONOMIC LEVELS

Variable	Rating	Description
Housing	Good (1)	Running water and lights. Adobe or cement block construction. Painted.
	Fair (2)	Adobe construction. Painted. Lights. No running water. With or without lean-to kitchen.
	Poor (3)	Adobe construction. Unpainted. Lean-to kitchen for cooking. No utilities.
Furniture	Good (1)	Upholstered living room furniture. Dining room furniture. Closets or wardrobes. Adequate beds (two persons per double bed).
	Fair (2)	Dining room funiture. Chairs, closets, and beds. Furniture may be urban (metal or plastic) or rustic (unpainted wood).
	Poor (3)	Beds, chairs, benches, small table. No dining table regularly used for meals.
Electrical Appliances	Yes (1)	Sewing machine or food blender.
	No (2)	Neither of the above items; radios, irons and television sets which may be found at any economic level.
Stove	Gas (1)	Gas stove used for cooking.
	Wood (2)	Wood used for cooking purposes.

Population density per room _____.

APPENDIX C

GUIDELINES FOR HEALTH HISTORY

1. Have you or a member of your family visited a clinic, hospital, or a doctor's office for help and/or treatment in the past year? If so, who and what for?
2. Were you satisfied with the help and treatment given you or the member of your family by the clinic, hospital, or doctor? If not, why not? If so, why?
3. Have you or any member of your family been sick in the past:
   6 months of this year, 1980
   In the previous 12 months? Last year, 1979.
   During 1978 and 1977 (two and three years ago)?
   During 1976, 1975 (four and five years ago)?
4. If so, who? What kind of illnesses?
5. To whom did you or other members of your family go for help and advice?
6. Why there?
7. Do you believe your present health status is good, average or poor? Why?
8. What is the immunization status of children below 12 years of age?

APPENDIX D

GUIDELINES FOR HEALTH BELIEFS AND PRACTICES INTERVIEW

Part A

Manifestations of Illness

1. Headache
2. Weakness
3. Vomiting
4. Cough
5. Lack of Appetite
6. Fever
7. Leg pain
8. Throat pain
9. Chills
10. Stomach ache
11. Crying
12. Sadness
13. Chest pain

1. What do you believe causes_____?
2. What would you do if you had _____ Why? ___
   _____.
3. Describe what you can do so that you won't suffer from_____
   _____.
4. Rank order these illnesses beginning with the most serious condition to the least serious condition.
5. Why are _____,_____, and _____ the most serious?

6. Why are _____, _____, and _____ the least serious?

Part B

1. There are some illnesses which people sometimes have that physicians do not believe in -- for example, el ojo, empacho, and susto. Have your or any member of your family ever had one of these diseases or other diseases that physicians do not believe in?" Can you describe the illnesses for me?
2. What is the best thing to do when you or a member of your family have one of these illnesses?

APPENDIX E

FAMILY HEALTH CALENDAR RECORDING

Person experiencing illness	Symptoms: client will describe in own words	What was done for the symptoms? Suggested by?	With whom did you talk to about the symptoms?
Date			
Date			
Date			
Date			
Date			

APPENDIX F

ILLNESS EXPERIENCE INTERVIEW

SCHEDULE

Illness Episodes

1. What kinds of symptoms did you have during your recent illness?
2. What do you believe caused these symptoms?
3. What remedies and/or treatments did you use?
4. Who suggested these remedies and/or treatments?
5. In what ways did these remedies or treatments help you?
6. What else did you do that made you feel better or aided in your recovery?
7. What activities were you unable to do?
8. What activities did you continue to do even though you were ill?
9. What effect did your illness have on other members of your household?
10. Who did you consult about your illness? Family? Friends? Neighbors? Others? Why this particular person(s)?
11. Describe your past and present relationship with the person(s) with whom you consulted for help and advice?
12. Did you seek help from a health care specialist? If so, who? Why did you choose this particular health specialist?
13. Who made the decision to seek this help?
14. Were you satisfied with the care you received from the health care specialist? If not, why not? If so, why?
15. What things did you like about this particular health care specialist?
16. What things did you not like about this health care specialist?

17. Where did you see the health care specialist?

18. What advice, help or treatment was given to you by the health care specialist?

APPENDIX G

REPORTED CONDITIONS OF ILL HEALTH AND

RESPONSES BY ADULTS

Table 32

Reported Conditions of Ill Health and Responses by Adults[a] During the Past Year (1979) in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self-Treatment	Private Physician	Curandero	Public Facility
Total	152	100	129	10	2	4
Respiratory	132	86.8				
Colds	57	37.5	51			
Flu	52	34.2	50			
Cough	20	13.2	12			
Tonsillitis	2	1.3	2	1		1
Asthma	1	.6	1		1	
Gastro-intestinal and Abdominal Conditions	7	4.6				
Abdominal pain	3	2.0	3	2		
Stomach infection	1	1.3	1	2		
Female problems	2	1.3	1	2		
Liver problems	1	.6				
Emotional Difficulties	2	1.3				
"Dolor de Corazon"[c]	1	.6				
Nervousness	1	.6				
Problems of the Lower Extremities	6	3.9				
Leg pain	1	.6	1			
Arthritis	1	.6	1			
Rheumatism	1	.6	1			
Allergy	1	.6	1	1		
Edema	1	.6		1		
Foot pain	1	.6				1

Table 32 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Neurological	2	1.3				
Headache	2	1.3	2	1		
Other	3	1.9				
Weakness, fatigue	1	.6	1			1
Anemia	1	.6				1
Bilis	1	.6	1		1	

[a]N = 73; All persons 18 years of age and over at the time of the survey.

[b]Based on total number of conditions reported in the category including multiple responses.

[c]Dolor de corazon is translated literally into English as "pain in the heart." It does not refer to chest pain, but more closely is associated with the notion of heartache. This particular 21 year old man described his dolor de corazon as a feeling of sadness, a heaviness in his heart when he thought of how hard his mother worked, how the family struggled along with very little money, and how he was unable to find a job that would enable him to contribute to the family finances and make life easier for all of them.

Table 33

Reported Conditions of Ill Health and Responses by Adults[a]

During a Two Year Period (1978 and 1977) in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Total	162	100	142	8	1	6
Respiratory	146	90.1				
Colds	59	36.4	50			
Flu	63	38.9	60	1		
Cough	23	14.2	20			
Lung problems	1	.6				1
Gastro-intestinal and Abdominal Conditions	8	4.9				
Abdominal pain	3	1.8	3	1	1	2
Stomach problems	1	.6	1	1		
Liver problems	2	1.2	2	1		1
"Female" problems	2	1.2	1	2		1
Emotional Difficulties	1	.6				
Nervousness	1	.6				
Neurological	2	1.2				
Headaches	2	1.2	2			
Problems with the Lower Extremities	3	1.8				
Arthritis	1	.6	1			
Rheumatism	1	.6	1			
Edema	1	.6		1		

Table 33 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Other	2	1.2				
Hepatitis	1	.6	1	1		
Heart problems	1	.6				1

[a]N = 73; all persons 18 years of age and over at the time of the survey.

[b]Based on total number of conditions reported in the category and including multiple responses.

Table 34

Reported Conditions of Ill Health and Responses by Adults[a]

During a Two Year Period (1976 and 1975) in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Total	165	100	141	12	1	11
Respiratory	148	89.6				
Colds	63	38.2	60			
Flu	57	34.5	52			
Cough	24	14.5	20			
Bronchitis	2	1.2	2	1		1
Tonsillitis	1	.6	1			
Lung problem	1	.6				1
Gastro-intestinal and Abdominal Conditions	6	3.6				
Surgery (Appendectomy)	1	.6				1
Stomach infection	1	.6	1			
Stomach problems	1	.6		1	1	
Liver problems	2	1.2	2	1		
Female conditions	1	.6				5
Emotional Difficulties	2	1.2				
Nervousness	2	1.2				
Neurological	3	1.8				
Headache	2	1.2	1			1
Epilepsy Attacks	1	.6		7		
Problems with Lower Extremities	3	1.8				
Rheumatism	1	.6	1			

Table 34 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Problems with Lower Extremities cont.						
Arthritis	1	.6	1			
Edema	1	.6				1
Other	3	1.8				
Broken leg	3	1.2		2		
Heart problem	1	.6				1

[a]N = 73; all persons 18 years of age and over at the time of the survey.

[b]Based on total number of conditions reported in the category and including multiple responses.

APPENDIX H

REPORTED CONDITIONS OF ILL HEALTH

AND RESPONSES FOR CHILDREN

Table 35

Reported Conditions of Ill Health and Responses During the Past Year (1979) for Children[a] in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Total	102	100	90	7	1	22
Respiratory	76	74.5				
Colds	26	25.5	23			
Flu	33	32.4	30	1		
Cough	15	14.7	11			
Bronchitis, Bronchial pneumonia	2	1.9	2	1		1
Gastro-intestinal	5	4.9				
Stomach infection	5	4.9	5	2		2
Contagious Diseases	15	14.7				
Impetigo	2	1.9	2			
Measles	8	7.8	8	2		2
Pertussis	4	3.9	4			1
Poliomyelitis	1	.9	1		1	15
Other	6	5.9				
Nosebleeds	1	.9				
Allergy	1	.9				
Leg pains	1	.9	1			1
Fever	2	1.9	2	1		
Accident	1	.9				

[a]Based on all children in the sample 17 years of age or younger at the time of the survey and born prior to 1978.

[b]Based on the total number of responses in the category and including multiple responses.

Table 36

Reported Conditions of Ill Health and Responses During A Two Year Period (1978-1979) for Children[a] in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Total	113	100	101	3	1	3
Respiratory Conditions	96	84.9				
Flu	35	30.9	30	1		
Colds	40	35.4	37			
Cough	19	16.8	17			
Bronchitis, Bronchial pneumonia	2	1.8	2			2
Gastro-intestinal	3	2.7				
Stomach infection	3	2.7	2	1	1	
Contagious Diseases	11	9.7				
Pertussis	3	2.7	3			
Chicken pox	1	.8	1			
Measles	7	6.2	2	1		
Other	3	2.7				
Dog bite	1	.8				1
Fever	2	1.8	2			

[a]N=15; based on all children in the sample 17 years of age or younger at the time of the survey and born prior to 1978 or 1979.

[b]Based on total number of responses included in the category and including multiple responses

Table 37

Reported Conditions of Ill Health and Responses During a Two Year Period (1976-1975) For Children[a] in the Sample

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Total	87	100	73	11	0	13
Respiratory	72	82.7				
Colds	28	32.2	25			
Gripe	26	29.2	21			
Cough	26	29.2	14			
Bronchitis and Bronchial pneumonia	3	3.4	3	2		
Gastro-intestinal	6	6.9				
Stomach infection	6	6.9	5			
Contagious disease	5	5.7				
Measles	2[c]	2.3	1	2		1
Chicken Pox	2	2.3	2			
Pertussis	1[d]	1.1	1	1		1
Other	4	4.6				
Dehydration	1	1.1	1	1		
Feeding problems in premature infants	2	2.3	2	5		11

Table 37 Continued

Conditions by Category	Frequency Reported		Responses[b]			
	No.	%	Self Treatment	Private Physician	Curandero	Public Facility
Unknown Illness	1[e]	1.1	1	3		

[a]N = 50; based on all children in the sample 17 years of age or younger at the time of the survey and born prior to 1976 to 1975.

[b]Based on total number of responses included in the category and including multiple responses.

[c,d,e]These two children were from the same family. The one-year old baby died from complications of measles and pertussis. Three months later her twelve year old sister died after a short illness. The family believed that it might have been the "stress" of developmental growth that prompted her death.

APPENDIX I

A VISIT TO A PRIVATE PHYSICIAN

Maria, a single 25 year old mother of two children had been suffering from abdominal pain for four days. The pain was often severe; she had been forced to stay home from a new job which she had held for only three weeks. She had been cared for primarily by her mother who had administered various home remedies. The mother, after consultation with two of Maria's sisters, decided that Maria should see a physician. The choice of physician was influenced by one of the sisters who said that a certain Dr. Aragon would see new clients on fairly short notice.

Maria reported that Dr. Aragon performed a brief abdominal examination and took some blood tests; then he prescribed two different kinds of medications for her. He told her to continue to stay at home in bed and return to see him in four days. He charged five dollars for the office visit; the medications cost twelve dollars. Maria had borrowed the money from her mother.

In spite of the medications and continued bed rest, Maria's condition did not improve. Dr. Aragon had not told her what he believed was wrong with her and this was a source of concern to both Maria and her mother. I was able to accompany the two of them when they returned for the second office visit.

We arrived about 11:00 a.m. as Maria's appointment was at 11:15 a.m. At approximately 11:30, the receptionist, who had been reading a novel, told us that the doctor had many other patients to see and suggested that we return at 1:00 p.m. When we returned in the afternoon, the doctor himself told us that he had an emergency at the hospital and that Maria's appointment had been rescheduled for 4:00 p.m. Maria's mother was nearly exasperated; she complained that doctors just wanted money, they did not care how difficult it was for a patient to come and see them.

The afternoon visit was somewhat more successful. We were ushered in to see Dr. Aragon shortly after we arrived. He asked Maria how she was feeling. Her mother spoke up and said that there had been little change or improvement in her condition. He then asked what medications she was taking. Unfortunately, Maria had left her medication bottles at home and could not remember the names of the drugs. Apparently, the doctor had not made a record of the prescribed medications; he glanced through a few pieces of paper on his desk and then said that he would have to know what medicines she was taking before he could do anything else for her. He suggested that she return home, pick up the medications and return to see him. Since Maria was experiencing considerable pain and nausea, I remained with her in the waiting room while her mother took the bus to the colonia for the medication bottles. We were all considerably annoyed at having spent the entire day going back and forth on buses trying to see the doctor.

Maria's mother returned in about an hour with the bottles of medicine. Dr. Aragon examined them and then told Maria to get the prescriptions refilled and continue taking them and return the following week to see him again. I asked what he thought was the cause of her illness. He replied that he thought she had anexitis de los trumpos de los ovarios (infection of the fallopian

tubes) and that the medication he had prescribed would take care of it. Maria's mother paid the receptionist five dollars for the office visit. There wasn't enough money left to refill the two prescriptions. Maria did continue taking them until they were gone. She was able to borrow another five dollars from her sister and returned to Dr. Aragon's office the following week. Once again he told her to continue taking the medications and return in another week. Maria did not tell him that she had been without medicine for almost a week because she could not afford to have the prescription refilled.

* * * * *

This example is not typical of the professional practice of all private physicians. I met and interviewed a number of physicians that, in my judgment, were excellent practitioners. They were genuinely concerned about their patients and demonstrated a high level of professional skills and expertise. Dr. Aragon had an important position in the local medical community and was the private physician seen most frequently by ill women in the sample. The fieldnotes taken during the study revealed that seven women in the sample sought his professional services in a ten month period. Six of these women were told that they had an infection of the fallopian tubes or ovaries; the seventh was not given a diagnosis.

APPENDIX J

A VISIT TO A CURA

Maria decided to seek another source of care after her three office visits to Dr. Aragon and no improvement in her condition. Her sister had heard about a well-known cura in a small pueblo about six miles from Quetzaltenango. She relayed the information to Maria and her mother and together they decided that Maria should visit him. I was invited to accompany them.

We arrived at 6:30 in the morning after a short bus ride. Maria's mother had been told that it was necessary to go very early because the cura saw many patients each day. Unfortunately, it was Monday and we were told by a receptionist that the office was closed on Mondays. She suggested that Maria drink a glass of puro agua (pure water) that was routinely given to all patients and return the following day.

We returned the next morning and were astonished to see almost thirty cars in the small parking lot; the waiting room was overflowing with clients waiting to see the cura. After waiting two hours, we were admitted to the small room which was used as an office and examining room. Dr. Victor, as he is known to his patients, was about 36 years old; in addition to his curandero practice, he was an Evanjelico minister with a small church adjacent to his clinic. He said that God gave him the gift of healing people, but that as a small boy, he also learned a great deal about different healing practices from an uncle who was a cura.

He looked carefully at Maria as she walked painfully into the room and immediately said to her, "Do not worry, I am going to give you a good examination to find out what is wrong with you." He examined her eyes with an opthalmascope and asked to see her tongue. He asked about her presenting symptoms and the course of her illness.

He then took a piece of paper from his desk drawer and wrote down the diagnosis in neat print: 1) ovaritis; 2) gastritis and 3) acido urico. He instructed Maria not to eat or drink coffee, tea, chilies, chimol (a hot sauce), or frijoles (beans). She was to bathe daily in cold water and immediately afterwards sit in the warm sunlight for five minutes. She was to walk a little in the morning, but rest in bed in the afternoons. He told her that she would be able to return to work in the next week.

He gave her three different capsules containing herbal medicines with written instructions of how to take them each day. He gave her an injection of penicillin and told her to purchase additional penicillin for four more injections, every other day. He handed her a prescription for the penicillin which she could show at the pharmacy when she bought the medicine. The office visit cost $8.00 and the penicillin injection was $1.26.

In discussing his practice, Dr. Victor said he believed that each disease has either a "natural" or a "supernatural" causation. He was able to cure either kind of illness. Maria had a "natural" illness, which he believed was caused by such factors as microorganisms, exertion, fatigue, poor nutrition or too much heat or cold. "Supernatural" illnesses were caused by fuerzas malas (evil forces). He reported that most of his clients had "natural"

illnesses. He stated that he occasionally saw serious cases of folk diseases, such as el ojo, empacho, susto, bilis, etc. but felt that for the most part, these were handled by women in the home situation.

Later, Maria stated that she had liked him very much because he explained everything to her without her asking him first. He told her what was wrong with her, exactly what the treatment would be, and that she would be able to return to work soon. She explained that being a minister, he must be a very good person and so many people came to him that he must have had many cures.

APPENDIX K

A VISIT TO A SPIRITUALIST

The spiritual center that is described here was staffed by three sisters, all spiritualists, and several of their female relatives. During one session each week, operaciones invisibles (invisible operations) were performed. Three other weekly sessions included diagnosis, treatment and/or protection from disease. On Sunday afternoons, a short session was held that offered only protection.

An informant who lived in the colonia often assisted with the rituals at the spiritual center. She stated she was able to communicate with espiritos (spirits) by praying and then listening to the voices in her head. She invited me to accompany her to a session to meet the spiritualists and to observe the invisible operations.

* * * * * * *

We arrived at the center in the early afternoon and were led into a room that appeared to be a combination living room-chapel. Near the doorway sat a receptionist who wrote down our names and asked what kinds of services we wanted. I asked for "protection" and was told that the charge was fifty cents. Just off from this room was another large room that contained ten hospital beds. Some patients (men, women, and children) were already in hospital gowns and lying in the beds. From a quick visual inspection, some of them appeared fairly ill. There was a strong smell of antiseptic solution in the room.

In the main reception area there was a basin of water. I was instructed to dip the palms of my hands in the water, rub them together and then over my head. The agua preparado (prepared water) had cleansing properties. Each person that entered the room followed this procedure. There were a number of pictures on the wall; it was explained that they were pictures of saints and famous doctors who returned to cure people. Several signs on the walls read silencio (silence). The ceiling was strung with paper cutouts, some in the shape of bells, others in the form of caducei.

The invisible operations took place in the room which contained the hospital beds; I was invited to observe the surgeries. The spiritualists had donned white hospital gowns over which they wore long white aprons. They wore rubber oxygen masks around their

necks. Since I was a nurse, I was given a white apron to wear and asked to hold the basin.

The various operations took almost two hours. As the spiritualists approached a patient lying in bed, they would put their masks over the lower portion of their faces. They would explain they were going to contact an "invisible doctor" who would "guide their hands" as they performed the necessary surgery. Family members stood quietly around each bed; some holding the hands of the patient and others just standing by silently.

One patient reported a painful lump in her breast; and was scheduled for an operacion invisible. She was accompanied by her husband and two daughters. The patient said that she felt very sleepy; the spiritualist began to pray out loud while her assistant made an "invisible" incision with a merthiolate-tipped cotton swab. The spiritualist explained that she was removing the tumor and that the woman would be cured. The surgical site was carefully cleansed with alcohol and the patient was told to remain in bed for two or three hours before going home. She was to rest in bed for three days and then return to the center at which time the "invisible doctor" would examine the surgical site to determine if there were complications. It is worth noting that I encountered this patient some two weeks later and she said the lump was gone and that she felt fine.

Some patients undergoing an invisible operation were given injecciones invisibles (invisible injections). Another spiritualist entered the room carrying a porcelain tray containing alcohol swabs, slices of lemon and stems of carnations broken into three inch pieces. They were used to simulate injections. After the injection, the lemon slices were "passed" over the injection site. The spiritualists explained that lemons have special powers for taking away evil. They also reported that sometimes during "major" operations, blood transfusions and intravenous therapy were necessary.

After the surgical intervention, two of the spiritualists (still wearing their white gowns and rubber masks around their necks) went into the large reception room. Sixty clients were waiting for them. We were called by name to a private session with one of the spiritualists. They each sat in a front corner with a long curtain separating them from view. Each client went behind the curtain and sat down on a chair facing the spiritualist. She asked me what I wanted and I asked for protection from illnesses. She leaned her head forward with her eyes closed for a few minutes; then she lifted her head and began to speak to me in a deep, almost masculine sounding, voice. I was instructed to boil some water and put it in a white plastic bowl. I was to make a sign of the cross in the water with slices of lemon and place this under my bed. It was to be changed every nine days.

REFERENCES

Adams, R.N. Nationalization. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol.6). Austin: University of Texas Press, 1967.

Adams, R.N. Crucifixion by power. Austin: University of Texas Press, 1970.

Adams, R.N. Harnessing technological development. In J.J. Poggie, Jr. & R. Lynch (Eds), Rethinking modernization: Anthropological perspectives. Westport: Greenwood Press, 1974.

Adams, R.N., & Rubel, R.J. Sickness and social relations. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6) Austin: University of Texas Press, 1967.

Ailinger, R. A study of illness referral in a Spanish speaking community. Nursing Research, 1977, 26, 53-56.

Alger, N. The Curandero-Supremo. In N. Alger (Ed.), Many answers. New York: West Publishing Company, 1974.

Alpert, J., Kosa, J. & Haggerty, R. A month of illness and health care among low-income families. Public Health Reports, 82, 705-713.

Arias, J.B. La populacion de Guatemala. Paris: Comite International de coordination de reserches en demographie (CICRED), 1976.

Badgley, R.F. & Schulte, M. Behavioral science and medicine in Latin America: A selected bibliography. Millbank Memorial Fund Quarterly, 1966, 44, 25-51.

Basch, P.F. International health. New York: Oxford University Press, 1978.

Beals, R.L. Notes on acculturation. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Beals, R.L. Acculturation. In R. Wanchope (Ed.), Handbook of Middle American Indians: Ethnology part I. (Vol. 7). Austin: University of Texas Press, 1967.

Bertrand, J.T., Pineda, M.A. & Soto, F.E. Communicating family planning to rural Guatemala. Chicago: The Community and Family Study Center, University of Chicago, 1978.

Brink, P.J. Transcultural nursing care. Englewood Cliffs: Prentice-Hall, Inc., 1976.

Bullough, B. & Bullough, V. Poverty, ethnic identity and health care. New York: Appleton-Century-Crofts, 1972.

Bunch, R. & Bunch, R. The highland Maya: Patterns of life and clothing in Indian Guatemala. Visalia, California: Indigenous Publications, 1977.

Byerly, E.L. The nurse-researcher as participant-observer in a nursing setting. Nursing Research, 1969, 18, 230-236.

Camera, F. Religions and political organizations. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Cancian, F.F. Economics and prestige in a Maya community. Palo Alto: Stanford University Press, 1965.

Cancian, F.F. Political and religious organizations. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Casagrande, J.B. In the company of man. In C.C. Hughes (Ed.), Custom-made. Chicago: Rand McNally College Publishing Company, 1976.

Chrisman, M. The health seeking process: An approach to the natural history of illness. Culture, Medicine and Psychiatry, 1977, 1, 351-377.

De la Fuente, J. Ethnic and communal relations. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

De la Fuente, J. Ethnic relationships. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press.

Demers, R.Y., Altamore, R., Mustim, H., Kleinman, A., & Leonardi, D. An exploration of the dimensions of illness behavior. Journal of Family Practice, 1980, 11, 1086-1096.

Diers, D. Research in nursing practice. Philadelphia: J.B. Lippincott Company, 1979.

Dingwall, R. Aspects of illness. London: Martin Robertson and Company, 1976.

Drietzel, H.P. (Ed.). The social organization of health. New York: Macmillan Publishing Company, Inc., 1971

Erasmus, C.J. Changing folk beliefs and the relativity of empirical knowledge. Southwestern Journal of Anthropology, 1952, 8, 411-428.

Ewald, R.H. Directed change. In M. Nash, (Ed.)., Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Fabrega, H., Jr. On the specificity of folk illnesses. Southwestern Journal of Anthropology, 1970, 26, 304-314.

Fabrega, H., Jr. In B.J. Siegel (Ed.), Medical anthropology: Biennial review of anthropology. Palo Alto: Stanford University Press, 1972.

Fabrega, H., Jr. Towards a model of illness behavior. Medical Care, 1973, 11, 470-484.

Fabrega, H., Jr. The need for an ethnomedical science. Science, 1975, 189, 969, 975.

Flores, A.M. Indian population and its identification. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Fonaraff, A. Cultural perceptions and nutritional disorders. Bulletin of the Pan American Health Organization, 1975, 12, 112-123.

Foster, G.M. Relationships between theoretical and applied anthropology: A public health program analysis. Human Organization, 1952, 2, 1-16.

Foster, G.M. & Anderson, B.G. Medical anthropology. New York: John Wiley and Sons, 1978.

Freeman, R. Community health nursing practice. Philadelphia: W. B. Saunders Company, 1978.

Freidson, E. Patients' views of medical practice. New York: Russel Sage Foundation, 1961.

Gillin, J. Ethos and cultural aspects of personality. In S. Tax (Ed.), Heritage of Conquest. Glencoe: The Free Press, 1952.

Glittenberg, J.K. Fertility patterns and child rearing of the Ladinos and Indians of Guatemala. In M. Leininger (Ed.), Transcultural nursing: Concepts, theories and practices. New York: John Wiley and Sons, 1978.

Goodenough, W.H. Cooperation in Change. New York: Russell Sage Foundation, 1963.

Gondoff, E. Guatemala: Trembling between order and breakdown. The Christian Science Monitor, February 4, 1981.

Higgins, M. Folk health care systems: A critical appraisal. In M. Leininger (Ed.), Transcultural Nursing '79. (Proceedings of the National Transcultural Nursing Conferences). U.S.A.: Masson Publishers Inc., 1979.

Hollingshead, A.B. & Redlich, F.C. Social class and mental illness. New York: John Wiley and Sons, 1958.

Hughes, C.C. & Hunter, J.M. Disease and development in Africa. In H.P. Dreitzel (Ed.), The social organization of health. New York: Macmillan Publishing Company, Inc., 1971.

Hupp, B.F. The Indians of Quezaltenango city. Unpublished masters thesis. University of Texas, Austin, 1969.

Hurley, R. The health crises of the poor. In H.P. Dreitzel (Ed.), The social organization of health. New York: Macmillan Publishing Company, Inc., 1971

Jelliffe, D.B. Culture, social change and infant feeding: Current trends in tropical regions. American Journal of Clinical Nutrition, 1962, 10, 19-45.

King, A.R. Urbanization and industrialization. In M. Nash (Ed.), Handbook of Middle American Indians (Vol. 6). Austin: University of Texas Press, 1967.

Kirchoff, P. MesoAmerica. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Jones, C.L. Guatemala, past and present. New York: Russell and Russell, 1966.

Leininger, M. Transcultural nursing: Concepts, theories and practices. New York: John Wiley and Sons, 1978.

Lewis, O. The possessions of the poor. Scientific American, 1969, 221, 114-124.

Lieban, R.W. The field of medical anthropology. In D. Landy (Ed.), Culture, disease and healing. New York: Macmillan Publishing Company, 1977.

Litman, T.J. The family as a basic unit in health and medical care: A social-behavior overview. Social Science and Medicine, 1974, 8, 495-519.

Livesey, H.B. Going Guatemala. Review, May 1979, 80-110.

Logan, M.H. Humoral medicine in Guatemala and peasant acceptance of modern medicine. Human Organization, 1973, 32, 385-395.

Lomnitz, L.A. Networks and marginality: Life in a Mexican shantytown. New York: Academic Press, 1977.

Madsen, W. Hot and cold in the universe of San Francisco Tecospa, valley of Mexico. Journal of American Folklore, 1955, 68, 123-129.

Madsen, W. Religious syncretism. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Mas de 2 milliones los analfabetos. La Nacion, Guatemala, 1980.

May, J.M. & McLellan, D.L. The ecology of malnutrition in Mexico and Central America. New York: Hafner Publishing Company, 1972.

Mechanic, D. Medical sociology. New York: The Free Press, 1968.

Mintz, J. & Wolf, H. Compadrazgo. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

National ambulatory medical care survey: 1977. Summary. In National Center for Health Statistics, Vital and Health Statistics (Series 13, No. 44). DHEW publication no. (PHS) 80-1795. Hyattsville: Government Printing Office, 1980, p. 20.

Nash, M. Machine age Maya: The industrialization of a Guatemalan community. Chicago: The University of Chicago Press, 1958.

Nash, M. Indian economics. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Office of the Mayor. Quetzaltenango, Guatemala. Personal communication, February 1980.

O'Neill, C.W. Changing symbols and values in a Zapotec community. Paper presented at the 71st Annual Meeting of the American Anthropological Association. Toronto, Canada: November, 1972.

Osborne, O. Anthropology and nursing: Some common traditions and interests. In P. Brink (Ed.), Transcultural Nursing. Englewood Cliffs: Prentice Hall Inc., 1979.

Palerm, A. Agriculture systems and food patterns. In M. Nash (Ed.), Handbook of Middle American Indians: Social anthropology (Vol. 6). Austin: University of Texas Press, 1967.

Pan American Health Organization. Pan American sanitary conference. Summary of the conference. Bulletin of the Pan American Health Organization, 1978, 12, 349-355.

Pan American Health Organization. Facts and figures on health in the Americas: A review of major trends (A report prepared by Health Statistics Office, Division of Health Services). Bulletin of the Pan American Health Organization, 1981, 12, 154-167.

Paul, B.D. Discussion. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Paul, B.D. Health, culture and community. New York: Russel Sage Foundation, 1955.

Paul, B.D. & Paul, L. The life cycle. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Paul, L., & Paul, B.D. Changing marriage patterns in a highland Guatemalan community. Southwestern Journal of Anthropology, 1963, 19, 131-148.

Pearsall, M. Participant observation as role and method in behavioral research. Nursing Research, 1965, 14, 37-42.

Polgar, S. Health action in cross-cultural perspectives. In W.E. Freeman (Ed.), Handbook of medical sociology. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.

Press, I. Urban illness: Physicians, curers and dual use in Bogata. Journal of Health and Social Behavior, 1969, 10, 209-218.

Roberts, B.R. Protestant groups and coping with urban life in Guatemala city. American Journal of Sociology, 1968, 73, 753-767.

Roberts, B.R. Organizing strangers: Poor families in Guatemala City. Austin: University of Texas Press, 1973.

Roemer, M.I. Medical care and social class in Latin America. Milbank Memorial Fund Quarterly, 1964, 42, 54-64.

Roemer, M.I. Columbian health services in the perspectives of Latin American patterns. Milbank Memorial Fund Quarterly, 1968, 46, 203-212.

Rubel, R.J. Concepts of disease in Mexican-American culture. American Anthropologist, 1960, 62, 795-814.

Rubel, R.J. The role of social science research in recent health programs in Latin America. Latin American Research Review, 1966, 2, 37-56.

Rubel, R.J. Social science and health research in Latin America. Milbank Memorial Fund Quarterly, 1968, 46, 21-33.

Saunders, L. Cultural differences in medical care. New York: Russell Sage Foundation, 1954.

Scott, C. Health and healing practices among five ethnic groups in Miami, Florida. Public Health Reports, 1974, 89, 524-532.

Scrimshaw, N.S. Myths and realities in international health planning. American Journal of Public Health, 1974, 64, 792-798.

Sepulveda, O. Research on behavioral science and medicine in Latin America. Milbank Memorial Fund Quarterly, 1966, 44, 52-69.

Sexton, J.D. & Woods, C.M. Development and modernization among highland Maya: A comparative analysis of ten Guatemalan towns. Human Organization, 1977, 36, 156-172.

Simmons, O.G. Popular and modern medicine in mestizo communities of coastal Peru and Chile. Journal of American Folklore, 1955, 68, 57-71.

Solien-Gonzales, M. Health behavior in a cross-cultural perspective: A Guatemalan example. Human Organization, 1966, 25, 122-125.

Sontag, S. Illness and metaphor. New York: Farrar, Straus and Giroux, 1977.

Tax, S. The municipios of the midwestern highlands of Guatemala. American Anthropologist, 1937, 39, 423-444.

Tax, S. (Ed.). Heritage of conquest. Glencoe: The Free Press, 1952.

Tax, S. & Hinshaw, R. The Maya of the midwestern highlands. In R. Wanchope (Ed.), Handbook of Middle American Indians: Ethnology Part I (Vol. 7). Austin: University of Texas Press, 1967.

Teller, C.H. Access to medical care of migrants in a Honduran city. Journal of Health and Social Behavior, 1973, 14, 214-226.

Trotter, R.T. & Chavira, J.A. Curanderismo: An emic theoretical perspective of Mexican-American folk medicine. Medical Anthropology, 1980, 4, 423-87.

Vogt, E.G. The Maya: Introduction. In R. Wanchope (Ed.), Handbook of Middle American Indians: Ethnology part I (Vol. 7). Austin: The University of Texas Press, 1967.

Wagley, C. The Maya of northwestern Guatemala. In R. Wanchope (Ed.), Handbook of Middle American Indians: Ethnology, part I (Vol. 7). Austin: The University of Texas Press, 1967.

Weaver, T. Use of hypothetical situations in the study of Spanish-American illness referral systems. Human Organization, 1970, 29, 140-154.

Wisdom, C. The supernatural world of curing. In S. Tax (Ed.), Heritage of conquest. Glencoe: The Free Press, 1952.

Wolf, E.R. Sons of the shaking earth. Chicago: University of Chicago Press, 1959.

Woods, C.M. Medicine and cultural change in San Lucas Toliman: A highland Guatemalan community. Unpublished doctoral dissertation, Stanford University, 1968.

Woods, C.M. & Graves. T.D. The process of medical choice in a highland Guatemala town. Los Angeles: University of California Latin American Center, 1973.

Young, J.C. Medical choice in a Mexican village. New Brunswick: Rutgers University Press, 1981.